प्राचीन नेपाल

पुरातत्त्व विभागको द्वैमासिक मुखपत्र

ANCIENT NEPAL

Journal of the Department of Archaeology

संख्या १४०
माघ २०५४

Number 140
February 1998

सम्पादक
साफल्य अमात्य

Edited by
Shaphalya Amatya

प्रकाशक
श्री ५ को सरकार
युवा, खेलकूद तथा संस्कृति मन्त्रालय
पुरातत्त्व विभाग
काठमाडौं, नेपाल

Published by
His Majesty's Government
Ministry of Youth, Sports & Culture
The Department of Archaeology
Kathmandu, Nepal

प्राप्ति स्थानः
साझा प्रकाशन
पुल्चोक, ललितपुर

To be had of:
Sajha Prakashan
Pulchok, Lalitpur

मूल्य रू. ५०/-

Price Rs. 50/-

Matribhoomi Press, Kamal Pokhari, Kathmandu, Nepal, Tel: 410284, 414076, Fax: 977-1-412501

प्राचीन नेपाल
ANCIENT NEPAL

संख्या १४०

माघ २०५४

Number 140

February 1998

सम्पादक

साफल्य अमात्य

Editor

Shaphalya Amatya

Contents

Page

Foreword
—Dr. Saphalya Amatya 1-2

Sa-'dul dgon-pa: A Temple at the Crossroads of Jumla, Dolpo and Mustang
—Franz-Karl Ehrhard 3-21

Houses and Households in Southern Mustang
—John Harrison and Charles Ramble 23-37

Watermills in Mustang: Notes on Architecture, Function and Management
—John Harrison and Charles Ramble 39-52

Ritual deposits at Garab-Dzong, Dist. Mustang
—Angela von den Driesch, Henriette Manhart, Petra Maurer and Ernst Pohl 53-64

Archaeological Research in Mustang: Report on the Fieldwork of the Years 1994 and 1995 Done by the Cologne University Team
—Angela Simons, Werner Schön and Sukra Sagar Shrestha 65-83

Excavations at Gotihawa: A Note on the Results Obtained during the First Excavation Campaign in Winter 1994-95
—Giovanni Verardi 85-105

Foreword

—Dr. Saphalya Amatya

I am happy to be back once again as the editor of the mouthpiece of the Department of Archaeology, "Ancient Nepal". The majority of the articles published in this issue are concerned with the archaeological activities and findings in the western Himalayan region of Mustang. The first article "Sandul Monastery: A Temple at the Crossroads of Jumla, Dolpa and Mustang" is written by Dr. Franz-Karl Ehrhard. In this article the author has not only enlightened us on the history of Sandul Monastery but also revealed many unknown facts about a spiritual Guru O-rgyan bstan-'dzin. According to the author Sandul Monastery was renovated from time to time. It was renovated for example in 1690 by the king of Jumla, Vikramasahi. Inside the monastery a statue of the King Vikramasahi is kept to keep his memory alive.

The second article in this issue is on "Houses and Households in Southern Mustang", written by John Harrison and Charles Ramble. In this article the authors describe a house of an Angyal Gurung community of Mustang. They have also tried to convey the idea that for a Gurung a house means being, as one prayer says, "......full of people; ......full of grain; ......and full of cattle".

The next article titled "Watermills in Mustang: Notes on Architecture, Function and Management" is also from John Harrison and Charles Ramble. In this interesting article the authors tell us how water power is used in the Mustang area and how water-mills are managed. It is fascinating to note that there are water-powered prayer-wheels in Mustang.

The next article is "Ritual Deposits at Garab-Dzong, Dist. Mustang", by Angela von den Driesch, Henriette Manhart, Petra Maurer and Ernst Pohl. This is a preliminary summary report of the findings of their archaeological excavation carried out in 1996.

Angela Simons, Werner Schön and Sukra Sagar Shrestha's article on "Archaeological Research in Mustang: Report on the Field Work of the Years 1994 and 1995 Done by the Cologne University Team", has revealed a fact that a homogeneous

population once lived in the Mustang area around 1000-500 B.C. They were the first settlers of Mustang. It was they who built the cave systems there, or to be more precise, funerary caves. The archaeologists have divided the prehistory of Mustang into two main phases — the "Chokhopani Phase" (about 1000-500 B.C.) and the "Mebrak Phase" (about 400 B.C. to 500 A.D.). In fact in the Mustang area there are still hundreds of unexplored caves likely to contain much new evidence of the part we have played in the rise of civilization.

Last but not least is an article by Giovanni Verardi on "Excavation at Gotihawa: A Note on the Results Obtained during the First Excavation Campaign in Winter 1994 - 95". The Gotihawa excavation has shown that a stupa was built near the pillar in the 3rd century B.C. This stupa was then enlarged and extended in the Saka and the Kushan periods (1st century B.C. and 2nd/3rd century A.D.). The author in his concluding remarks says "thanks to the presence of a dated charcoal in our site, we think, however, that the caution demonstrated by Herbert Haertel (1991) in evaluating the chronology of the archaeological sites in the District of Lumbini and Kapilavastu and in the adjacent Indian ones is too great, and that the archaeological sequence in this part of the Terai goes certainly back to a period preceding the earlier possible date to which the life of the Buddha can be attributed". In this issue all the drawings and photographs published are of very good quality and they help us to understand the authors viewpoints clearly.

Finally, I would like to thank and congratulate all the authors for their valuable contribution to this issue of our journal.

Sa-dul dgon-pa: A Temple at the Crossroads of Jumla, Dolpo and Mustang*

—Franz-Karl Ehrhard

The last three of his fourteen Himalayan expeditions brought Giuseppe Tucci (1894-1984) to Nepal and its north-western districts. The expedition in the year 1954 expedition retraced the route from Pokhara to the northern part of Mustang —which Tucci had already covered in 1952—and took him afterwards to the region of Jumla. There he discovered the genealogical records of the Malla kings, once the rulers over a territory covering both the western parts of Nepal and the Tibetan regions of Purang and Guge.

On his way to Jumla, Tucci passed through the southern fringes of Dolpo and came across several religious edifices, about which he noted the following:

> Before reaching Pale one sees to the left of the Tarāpkhola the *bSam 'dul dgon pa* (on the map Chhandul Gompa): other small shrines are in the valley of the Bārbung kholā: *bDe c'en dpal ri* and *'Bri gung dgon pa.*[1]

Concerning the first site this information can be supplemented by the description of a fellow traveller, David Snellgrove, who paid a visit to the area two years later, i.e. in 1956:

> Sandul Monastery (SI: Chhandul Gōmpa) is about five miles beyond Tārakot and stands at the junction of the Beri and the stream that descends from Tarap. Thus one has to cross the Bheri to reach the temple; the tracks lead down by crazy steps through the rocks to a tree-trunk bridge which spans a deep and narrow

*For helpful corrections and suggestions I have to thank David Jackson (University of Hamburg) and Philip Pierce (Nepal Research Centre, Kathmandu).

gorge. All the rocks are incised with the spell OṂ MAṆI PADṂE HŪṂ and one feels as though one were to enter some hidden idyllic valley, of which Tibetans love to tell, where men and animals live in peace and harmony.[2]

The general state of decay and abandonment of temples and sanctuaries in the region of Tichurong around the upper course of the Bheri River, which bears the name Barbung near to its source north of the Dhaulagiri, was some years later reconfirmed by the observations of Corneille Jest. But in the case of *Sa-'dul dgon-pa* (and the *'Bri-gung dgon-pa*, lying further south-west, high above the Bheri), there were also signs that Buddhist traditions were being revitalized and religious shrines were being kept intact. These activities resulted from the enthusiasm of one bla-ma in particular: the so-called Shangs Rin-po-che (died 1958).[3] Later the temple fell again into disrepair, and today only the inner sanctum at the rear side of the building reminds the visitor of earlier times when this site attracted pilgrims and religious dignitaries who were on their way to Jumla, Dolpo, Mustang and the regions beyond (see picture I).

As the history of the spread of Tibetan Buddhism in Tichurong / Barbung is still little documented and as this area lies halfway between the political and cultural centres of Jumla and Mustang, being traversed by one of the old Himalayan trade routes, I think it worthwhile to present here some recently discovered materials on *Sa-'dul dgon-pa*. The main historical guidelines are provided by the collection of spiritual songs of O-rgyan bstan-'dzin (1657-1737), which are structured around the principle events of his life. It was this teacher of the rNying-ma-pa school who brought *Sa-'dul dgon-pa* to new glory at the turn of the 17th and 18th centuries, and his name is still remembered among the people of Dolpo as one of their spiritual forefathers.

1. Education and travels of o-rgyan bstan-'dzin

The main teacher of O-rgyan bstan-'dzin and the one who ordained him and gave him his religious name was O-rgyan dpal-bzang (1617-1677), a native of southern Mustang and founder of the monastery *sKu-tshab gter-lnga* near present-day Thini. His ordination took place in the year 1668, and the location where the teacher and his disciple came together was called *Kun-bzang brag*. This name refers to a spot near **sKag[-rdzong]**, the settlement next to *Sa-'dul dgon-pa* in the eastern direction.[4]

Following the advice of his teacher, O-rgyan bstan-'dzin proceeded at the age of seventeen to Central Tibet and took up his studies at the Sa-skya-pa monastery *rTa-nag Thub-bstan rnam-rgyal*. After visits to **lHa-sa** and **bSam-yas**, his return trip led him via **Ding-ri** and **sNya-lam** to the Kathmandu Valley and also to **sKyid-grong** and its holy mountain **Ri-bo dpal-'bar**. From the masters he met in the region of **sKyid-grong**, I would like to mention at least a certain rGyal-dbang seng-ge (born 1628); from him O-rgyan bstan-'dzin received the teachings of the treasure cycles of Rig-'dzin 'Ja'-tshon snying-po (1585-1656).[5]

Returning to his homeland—during his travels O-rgyan bstan-'dzin was once called the "man from the region of Dolpo"—he continued his studies under two further teachers. The first one was Bla-ma Thub-bstan dbang-po and the second, Bla-ma dPal-ldan rdo-rje. It is known from their respective biographies that Thub-bstan dbang-po was a

follower of the 'Brug-pa bKa'-brgyud-pa school who had received teachings from the 5th 'Brug-chen dPag-bsam dbang-po (1593-1641), and that dPal-ldan rdo-rje was a Sa-skya-pa master affiliated with the monastery of **Hrab** in northern Dolpo.[6]

Having completed this training in his twenty-fourth year (1681), O-rgyan bstan-'dzin pondered the question whether he should continue the studies of "the tantras of the system of the new [translations]" (*gsar ma lugs kyi rgyud*) and proceed a second time to Central Tibet, or stick to "the teaching of the old [translations]" (*rnying ma lugs kyi chos*) in the way he was instructed before. At that time a vision of Ye-shes mtsho-rgyal occurred to him and the divine lady uttered the following words: "You, son, are you not a priest of U-rgyan Padma[sambhava]? If you want the siddhis, [why] don't you go to request the teaching from Rig-'dzin Gar-dbang rdo-rje?" After more visionary experiences, and in the end asking his teacher dPal-ldan rdo-rje for leave, O-rgyan bstan-'dzin set out again for the region of **sKyid-grong**. After barely escaping death on a high pass because of heavy snowfall for three days, he finally reached the place called **mNyam** in the region of **sKu-thang**; and there, at "the Site of the Guru's [= Padmasambhava's] Spiritual Practices" (*gu ru'i sgrub gnas*), in a cave bearing the name **Shel-phug**, he met Rig-'dzin Gar-dbang rdo-rje (1640-1685) in person. The main teachings he received from the "treasure-discoverer" (*gter ston*) concerned the treasure-work *Zab tig chos dbyings rang gsal,* and there has survived a commentary which O-rgyan bstan-'dzin composed at a later time to a part of this cycle.[7]

Following the admonitions of the so-called mNga'-ris gTer-ston to live in "solitary places (which are) hermitages" (*ri khrod dben gnas*) for progress in his spiritual discipline, O-rgyan bstan-'dzin afterwards devoted his time fully to the teachings of the newly discovered treasure-cycle. The next major event in his life was the death of Thub-bstan dbang-po in his twenty-ninth year, i.e. in 1686. With the aim of getting manufactured a proper "receptacle for the relics" (*gdung rten*) of his deceased teacher, O-rgyan bstan-'dzin directed his steps towards the valley of Kathmandu and brought back a magnificent statue of Padmasambhava. He was able to erect a temple for housing the image on the spot where Thub-bstan dbang-po had had his living-quarters; this temple he called *bDe-chen rDzong-gi lha-khang,* and it served him as residence for the years to come. This temple is known still today under the name *bDe-chen dpal-ri* and is located to the south-east of *Sa-'dul dgon-pa* in the village Tangchen/Tachen, on the opposite side of the Bheri River.[8]

Finally, O-rgyan bstan-'dzin received teachings from Kun-bzang klong-yangs, the successor of O-rgyan dpal-bzang at *sKu-tshab gter-lnga* and his senior by thirteen years. Besides the reading of the biography of their common teacher, special mention is made of the treasure-cycles of Rig-'dzin gTer-bdag gling-pa (1646-1714). Just shortly before this encounter, in 1688, Kun-bzang klong-yangs had stayed in the presence of this treasure-discoverer at *sMin-grol gling* in Central Tibet. He had been well received there and had spent a period of altogether eight months at *sMin-grol gling.*[9]

2. Restorations of sa-'dul dgon-pa and their sponsors

With the year 1690 we come finally to the temple that is the subject of the present investigation. Obviously the building and the sacred items

housed there were already at that time not well-kept:

> Now, at the time of my thirty-fourth year, the *Bhūpala*, the ruler, the king of Jumla, *Bhi-ri-sras* (by name), as he had issued the strong request to renovate the vihāra of *Sa-'dul*, I restored the three inner sanctums and erected representations (i.e. statues) of Mahāmuni, O-rgyan Rin-po-che (i.e. Buddha Śākyamuni and Padmasambhava), and others. What amounted to a *zho* (of silver) from the king (of Jumla) himself, what amounted to a *zho* (of silver) from the ruler of Mustang, bSam-'grub dpal-'bar (by name), and further more, what all the monastic community and commoners had brought together —great things (like) horses and yaks, and small things (like) white-wash (?)— when it (all) had been brought together and offered, the receptacles were set up (by me).[10]

A closer look should now be taken at the sponsors who are highlighted in this quotation. The identification of the king of Jumla poses some problems, as the name *Bhi-ri- sras* is a transliteration of a vernacular and can be interpreted in different ways (and thus made to apply to different historical persons). Given the fact that Tib. *sras* is the phonetical rendering of Nep. *śāhi*—as attested in a Tibetan document dated before the conquest of Jumla by Gorkha in the year 1789—we could hypothetically identify *Bhi-ri-sras* as one of the fourteen Śāhi or two Śāha kings of the Kallala dynasty of Jumla, who ruled the kingdom during the period from the 15th to 18th centuries.[11]

The names Vikramaśāhi and Vīrabahaduršāhi might have served as possible candidates for the person of the Tibetan rendering *Bhi-ri-sras*, but their regnal years were 1602-1621 and 1635-1665 respectively, and thus they lived too early. A third candidate would be Vīrabhadraśāhi, but his reign (1665-1676) does not match the year of the renovation of *Sa-'dul dgon-pa* either. Nevertheless, an interesting detail of his kingship is that he ruled the country from Kakakot and Tibrikot. The first toponym I take to be identical with Tib. **sKag-rdzong**, the place in the vicinity of *Sa-'dul dgon-pa* which had provided residence for the teachers of the rNying-ma-pa and bKa'-brgyud-pa schools.[12]

If we turn now to the oral traditions of local kings in Tichurong, it is the person of Vīrabhadraśāhi—and especially his son—that are still remembered up to the present day. The name of this son is Vikram[a]śāh[i/a], and I take him to be the person who called for the renovation of *Sa-'dul dgon-pa* in the year 1690. This Vikramśāh (*Bhi-ri-sras*) can easily be confused with his predecessor of the same name (and this fact might have contributed to his local fame), but it is not only the name of Vikramśāh that still lives on in the region; a statue of the king also keeps his memory alive. This statue is kept in the inner sanctum of *Sa-'dul dgon-pa* and is a visible proof of the royal patronage of the site (see picture II).[13]

The mention of a ruler of Mustang by the name of bSam-grub dpal-'bar comes as no surprise in the present context. We know from different sources that this ruler was very active in providing financial assistance to the Buddhist religion, and there exists a separate work describing his renovation of the *Byams-pa lha-khang* in **Glo-bo sMon-thang**, the capital of Mustang, in the year 1663. That the temple at the crossroads of Jumla,

Dolpo and Mustang was sponsored both by Vikramśāh and bSam-'grub dpal-'bar can by implication be interpreted as a visible sign of the political (and cultural) dependence that tied Mustang to Jumla in the 17th and 18th centuries. This dependence must be taken into account when we deal with the history of religious structures in an area that is something of a border region between these two kingdoms.[14]

Concerning the actual renovation work, the fact is perhaps worth mentioning that felled trees were brought down from **rTa-rong**, i.e. the gorge of the Tarap Khola, by raft, but were in the end carried away by turbulent waters. About a thousand loads of wood had therefore to be transported to the 'Plain of **Sa-'dul**' (*sa 'dul gyi thang*) by human labour. This should be sufficiently revealing of the first stage of restoring *Sa-'dul dgon-pa*, which obviously was initiated by royal orders.

The next years in the life of O-rgyan bstan-'dzin saw him mainly active at his residence in **bTang-byon**, the *bDe-chen rDzong-gi lha-khang*, and it was again the procuring of a further statue for this temple that made a second trip to the Kathmandu Valley necessary. There he paid a visit to the Svayaṃbhūnāth-stūpa, ordered a statue of the future Buddha Maitreya from the artist Abhadeva in Patan, paid his respects to the Bodhnāth-stūpa, and held a Gaṇacakra-feast at the top of the mountain **Ri-bo 'big-byed**, i.e. Jāmācok.[15]

At the age of 43, in the year 1700, O-rgyan bstan-'dzin assumed the task of a further renovation of *Sa-'dul dgon-pa*, this time not under official orders, it seems, but on his own. The three inner sanctums are mentioned again, along with the statues of Buddha Śākyamuni and Padmasambhava, and the difficulties of working at the spot because of an avalanche. In a spiritual song following the description of the different repair works, the "benefits of the sacred site" (*gnas kyi phan yon*) are praised by O-rgyan bstan-'dzin; he labelled this song an "inventory" (*dkar chag*) of the place. We can observe in it the process by which *Sa-'dul dgon-pa* and its wider surroundings are transformed into an idealized landscape and accorded at the same time the status of a "hidden land" (*sbas yul*). In the context of different schemes and names for classifying the area at the confluence of the Tarap Khola and the Bheri Khola, the fact emerges that the temple was originally founded by a certain Chos-rje Dar-pa, a siddha of the bKa' brgyud-pa school.[16] The list of patrons opens with the names of the ruler of Mustang and the king of Jumla —followed by the local benefactors and their villages—and we can thus interpret also this second restoration of the temple as a visible sign of a specific political constellation in which Mustang was one of the petty states dominated by Jumla.

3. Later years and the visit of Kaḥ-thog rig-'dzin

It was again at his residence, the *bDe-chen rDzong-gi lha-khang*, that O-rgyan bstan-'dzin instructed his growing circle of disciples in the first years of the 18th century, using treasure-cycles like *Zab tig chos dbyings rang gsal* as the basic texts. On one occasion he made the noteworthy remark that the teachings of the "Great Perfection" (*rdzogs chen*) had in earlier times not reached the region of Dolpo. But this gets us ahead of the course of actual events. First we have to take note of the pilgrimage to the area of Mount Kailāśa and Lake Manasarovar in 1704 which was performed in the company of a group of his disciples. This intended

"circumambulation of the snow mountain" (*gangs skor*) led O-rgyan bstan-'dzin first to the royal court of Jumla, where he received financial support from the kings of Jumla, including Mahārāja Vikramśāh (*Bhi-ri-sras*); such wording suggests that the power at the court was shared among different rulers at the time. Crossing the region of **'Om-lo lung** —present-day Humla—he reached the sacred mountain and stayed at different places in the area, among them the famous cave known as **rDzu-'phrul phug**. His return took him via another route to the region of **sLe-mi**—present-day Limi—to the north-west of Dolpo, and there he paid a visit to a sacred mountain of some local renown, the so-called **Shel-mo gangs**.[17]

Passing **Ting-kyu** in upper Dolpo, O-rgyan bstan-'dzin then visited, for the first time, the valley of **rTa-rab** in the southern part of Dolpo —this at the invitation of the teachers and patrons from *Me-skyems dgon-pa*. The name of this monastery shows up several times more in his autobiographical works covering the years to come, and it was especially from it that the local tradition of the teachings of Padmasambhava spread further in that area.[18]

Nevertheless O-rgyan bstan-'dzin also continued his religious activities in Tichurong after having returned there. Eventually he gave way to urgent requests to become the overseer (*zhal bdag*) of *'Bri-gung dgon-pa*, the temple on the lower course of the Bheri Khola above Yalakot. The fact that Vikramśāh, the local king in the line of Jumla rulers, had a special connection with *'Bri-gung dgon-pa* is obvious from the two designations of the temple: it bears the name "the Jumla king's most excellent island of liberation" (*'dzum lang rgyal po'i thar pa gling mchog*) and—more prosaic—"monastery of king Bir" (*bir rgyal dgon pa*). It should also be remembered that according to the local tradition Vikramśāh was born in the village of Yalakot. O-rgyan bstan-'dzin thus attended to that religious edifice as well and finished his work with a proper act of consecration.

During the account of this period, the name bsTan-'dzin ras-pa (1644/46-1723) is mentioned, and we come to know that an exchange of letters took place between O-rgyan bstan-'dzin and this yogin of the 'Brug-pa bKa'-brgyud-pa school, who was a native of the Muktināth valley and the founder of *Shel dgon-pa* in upper Dolpo. This latter region was the destination of the next journey of O-rgyan bstan-'dzin. He met bsTan-'dzin ras-pa personally in *Shel dgon-pa* and performed afterwards the pilgrimage around the sacred mountain of **Shel-gyi ri-bo ['brug-sgra]**, from which the monastery derived its name. Before the leg of the journey through the western part of upper Dolpo, the eastern part was traversed, and its inhabitants received public initiations from the priest. Two places are especially noted by O-rgyan bstan-'dzin, who devoted some spiritual songs to them: **gNas-mchog Gra-lung** and **dMar-sgom**. These are sites where teachers of the Ngor-pa subsect of the Sa-skya-pa school had been active from the 16th century onwards.[19]

Without going into more details of O-rgyan bstan-'dzin's further travels to *Me-skyems dgon-pa* in the valley of **rTa-rab** and to the villages in upper Dolpo—including a further meeting with bsTan-'dzin ras-pa—I want finally to direct attention again to the temple of *Sa-'dul dgon-pa* and its wider surroundings. According to the available written sources, it seems that from his sixtieth year onwards O-rgyan bstan-'dzin frequented sites to the north of *Sa-'dul dgon-pa*, near the village of **Glang**, as places conducive to the pursuit of his spiritual

endeavours. One of these sites was called "Horse Ferry" (*rta gru*), and it is in connection with this toponym that the person of O-rgyan bstan-'dzin remained alive in the memory of generations of priests following his tradition. Another one was known to the local people by the name "Sun-Cave, the hermitage of the land of **Glang**" (*glang yul gyi ri khrod nyi ma phug*); this location served at the same time as residence for A-ni Chos-skyid, a female disciple of O-rgyan bstan-'dzin, remembered as well in southern Dolpo down to the present day.[20]

A final example of the importance *Sa-'dul dgon-pa* achieved in the 18th century as a temple where religious discourses were given and as an entry point to hidden sites lying beyond can be found in the biography of Kaḥ-thog Rig-'dzin Tshe-dbang nor-bu (1698-1755). As his stay in *Sa-'dul dgon-pa* in the year 1730 was followed by a personal encounter with O-rgyan bstan-'dzin in **rTa-gru**, I shall present this episode from the perspective of both persons in an appendix.[21] With this teacher from the region of Kaḥ-thog in Eastern Tibet, we have reached also the last formative element in the spiritual life of O-rgyan bstan-'dzin: although by four decades his junior, he counted Rig-'dzin Tshe-dbang nor-bu as one of his three main teachers (the other two being O-rgyan dpal-bzang and Rig-'dzin Gar-dbang rdo-rje).

After bringing a further renovation project to a sucessful end—this time at **sKag-rdzong**, in the vicinity of his old residence—and a last journey to his disciples in northern Dolpo, O-rgyan bstan-'dzin died seven years later in **rTa-gru**, the inner part of the hidden land he had created around the 'Plain of **Sa-'dul**.'

Notes

1. See Tucci (1956:37, note 1) and the attached map (reproduced at the end of this paper). This publication contains the results of Tucci's expeditions of 1952 and 1954. A popular version of the discovery of the historical records of the Malla kingdom is Tucci (1962). For an overview of the genealogy of the royal house—its last and most powerful ruler being Pṛthvīmalla (regnal years 1338-1358)—and remarks on Tucci's reconstruction of the origins of the Mallas, compare Sharma (1972:17-20 and 40-41). See also Klimburg-Salter (1991) for the different research expeditions of Tucci in the Himalayan regions.

2. Snellgrove (1961:39). A description of the temple itself can be found ibid.(40): "There are traces of older building in some carved wooden beams, which display more expert craftsmanship, and one can see the stone foundations of other buildings behind the present temple, indicating that this site must once have been of far greater importance .... It is apparent that this temple receives little or no support nowadays."

3. See Jest (1971:75): "Ce qu'il faut souligner toute fois avec Snellgrove, c'est l'aspect d'abandon que l'on remarque dans les temples et les sanctuaires, aspect qui s'est encore accentué ces dernières années; le lama de Shang a bien essayé de redonner vie à la religion bouddhique en 1954-55...". Cf. Jest (1975:308): "Shang Rinpoche a séjourné cinq mois a Tichurong en 1951, les onzième et douzième mois à *sa-'dul dgon-pa*, les premier, deuxième et troisième à *'bri-guṅ*. Il a fait remettre en état les deux temples, redresser les chörten en ruines, recrépir et décorer les constructions élevées par le roi de Jumla. La lama de Shang avait prédit qu'il construirait ou reconstruirait quatorze temples. Les deux derniers sont ceux de *sa-'dul* et de *'bri-guṅ*." On the rebuilding of *Sa-'dul dgon-pa* and *'Bri-gung dgon-pa* by Shangs Rin-po-che and his travels in Mustang, Nyi-shang and sNar, cf. also Snellgrove

(1961:37, 39-40 and passim). The mummified corpse of the bla-ma is still kept in northern Dolpo, as narrated by Jest (1985:140-147).

4. For general information concerning O-rgyan dpal-bzang and the founding of the monastery of *sKu-tshab gter-lnga*, see Snellgrove (1979:79-81). The ordination of O-rgyan bstan-'dzin occurred on O-rgyan dpal-bzang's journey to the area of Barbung preceding the actual foundation of *sKu-tshab gter-lnga* in 1668; compare the data in Ehrhard (in press a). A second disciple of O-rgyan dpal-bzang who had received his religious name in *Kun-bzang brag* was Kun-bzang klong-yangs (1644-1699). A scion of the ruling family of **sKag[-rdzong]** in Barbung—not to be confused with Kagbeni, at the confluence of the Kalī Gandhakī and Muktināth rivers—he eventually became the successor of O-rgyan dpal-bzang at *sKu-tshab gter-lnga*. For a description of this teacher's visit to **sKag[-rdzong]** and the spot *Kun-bzang brag*, see his autobiography: *rTogs brjod mu tig gi mchun bu (= chun po) zhes pa'i gtam*, fols. 16b/6-17b/3. A manuscript from **sKag[-rdzong]** was purchased by Tucci; see id. (1956:15).

5. For presenting the main events in the life of O-rgyan bstan-'dzin, I follow NYAMS-DBYANGS; for the period up to the stay in the area of **sKyid-grong**, see ibid., pp. 7.3-13.5. The text RNAM-THAR was written by the author in his seventieth year upon the request of his disciples to produce a condensed version of the first work; cf. ibid., pp. 5.3-19.4 for the journey just mentioned.
The teacher rGyal-dbang seng-ge was one of the main disciples of Karma Blo-bzang, "resident" (*gnas 'dzin pa*) of the religious site **Brag-dkar rta-so** to the north-east of **sKyid-grong**. He was also in contact with O-rgyan dpal-bzang and Kun-bzang klong-yangs; see *Rigs brgya dbang po 'dren mchog slob dpon dpal bzang po'i rnam par thar pa*, fol. 314a/2-3, and the text mentioned in note 4, fol. 39b/2-4. In the year 1665 rGyal-dbang seng-ge wrote the biography of his father 'Od-zer rgya-mtsho (1574-1661): *Bya btang 'od zer rgya mtsho'i rnam thar*.

6. For Thub-bstan dbang-po see his biography: *Bla ma rin po che sbas pa'i rnal 'byor pa chen po thub bstan dbang po'i rnams (= rnam) thar*. Concerning the founding of a monastic settlement in **Hrab** by dPal-ldan blo-gros (1527-1596), see Snellgrove (1967:11). A further teacher associated with this site by the name of dPal-ldan bzang-po is known as well; see ibid. (241). For the writings of dPal-ldan rdo-rje, see the texts mentioned in Ehrhard (in press b, note 5). This period in the life of O-rgyan bstan-'dzin can be found in NYAMS-DBYANGS, pp. 13.5-20.1.

7. See NYAMS-DBYANGS, p. 20.4, for the quote (*bu khyod u rgyan padma'i btsun pa ma yin nam / dngos grub 'dod na rig 'dzin gar dbang rdo rje la chos zhu ru mi 'gro'am*), and ibid., pp. 23.4-26.4, for the detailed account of his stay with the treasure-discoverer. It should be mentioned that O-rgyan dpal-bzang had visited Rig-'dzin Gar-dbang rdo-rje as well in the cave **Shel-phug** north of the Manāslu region with the aim of inspecting some of the findings of the treasure-discoverer; see Ehrhard (in press a).
Another teacher from Dolpo who had studied directly under Rig-'dzin Gar-dbang rdo-rje—in the year 1679—was Ngag-dbang rnam-rgyal (born 1628) from **gNam-gung**; on him and the teachings received see Ehrhard (in press b). The commentary written by O-rgyan bstan-'dzin bears the title *bKa' rdzogs pa chen po zab tig chos dbyings rang gsal las phyag rgya chen po gnyug ma gcer mthong gi khrid*.

8. See NYAMS-DBYANGS, pp. 34.3-35.2, for the death of Thub-bstan dbang-po and the construction of the temple. In RNAM-THAR, p. 21.5-6, these events are condensed to three lines: *gdung brten (= rten) bzhengs ru (= bzheng du) bal du phyin / o rgyan sku nang gdung rnams bzhugs / da lta de (= bde) chen dpal rir bzhugs*. The biography of Thub-

bstan dbang-po provides the information that this teacher was born in **gTang-byon**, on the borderline between Tibet and the gorges (*bod rong gnyis kyi so (= sa) mtshams*).
The epithet "temple of the fortress" (*rdzong gi lha khang*) suggests that the religious services held there were connected with the ruling family of **sKag[-rdzong]**. I suppose that the toponyms **sTeng-shog / bTang-shog** are alternative spellings for **gTang-byon** and thus refer to the same locality. The first spelling can be found in the biography of O-rgyan dpal-bzang and refers there to the spot from where the people came who attended the teachings during his stay in **rKag[-rdzong]**; see the the text (as in note 5), fols. 315b/6-316a/1 (... *steng shog lung gang gi gra (= grva) rigs thams cad 'dus nas*). According to the biography of Kun-bzang klong-yangs it was from **bTang-shog** that Karma Blo-bzang, the "resident" of **Brag-dkar rta-so**, was invited to **sKag[-rdzong]**; see the text (as in note 4), fols. 10a/6-b/1 (*rims (= rim) can btang shog lung bar spyan 'dren zhus khyad par bdag gis (= gi) pha dang a khu tshos skag rdzong du spyan 'dren zhu dus*). Karma Blo-bzang was the founder of **gNam-gung** in northern Dolpo; see Ehrhard (in press a, note 10).

9. For the studies with Kun-bzang klong-yangs, see NYAMS-DBYANGS, pp. 38.1-42.3; cf. RNAM-THAR, pp. 22.1-3. In the biography of Kun-bzang klong-yangs (as in note 4), fols. 66a/4-67a/5, the study period is described in still greater detail; it was resumed in *Kun-bzang brag* near **sKag[-rdzong]** during conditions of extreme winter cold. For the visit of Kun-bzang klong-yangs to the monastery of *sMin-grol gling* and his studies with Rig-'dzin gTer-bdag gling-pa, see ibid., fols. 57b/3-65b/1. These data for the year 1688 are confirmed by the biography of the treasure-discoverer; see *gTer chen chos kyi rgyal po'i rnam thar dad pa'i shing rta*, pp. 314.6; 315.6; and 316.6. He is referred to there under the name Glo-bo bla-ma Kun-bzang klong-yangs or Glo-bo-pa Kun-bzang klong-yangs.

10. NYAMS-DBYANGS, p. 42.3-5: *yang rang lo so bzhi pa'i dus su / sa skyong mi'i dbang po 'dzum lang rgyal po bhi ri sras kyis / sa 'dul gyi gtsug lag khang gi zhig bsos (= gsos) byed dgos pa'i bka' nan ches pa'i btabs (= btab) kyis / gtsang khang gsum gyi zhig bsos (= gsos) dang / thub chen dang / o rgyan rin po che'i sku tshab sogs bzhengs pas / rgyal po rang gi zho gang / blo bo (= glo bo) sde pa bsam 'grub dpal 'bar gyi zho gang / gzhan yang skya ser kun gyi 'brel par / che ba rta dang g.yag / chung ba dkar cig (= rtsi ?) gnyis kun gyi 'brel par phul nas rten bzhengs pas*. The funds for gilding the statues came from a man called gTang-byon-pa Yon-bdag bKra-shis phun-tshogs; see ibid., p. 43.3-6. He had also been the sponsor for the construction of the *bDe-chen rDzong-gi lha-khang* (see note 8).

11. For the history of the Kallala dynasty which followed the royal house of the Mallas, see Pandey (1970) and (1971); the numbering of eleven kings whose names end with the suffix *rāj*, followed by the names of the fourteen Śāhi and the two Śāha kings can be found in Pandey (1970:45). The Tibetan document—a treatise between Jumla and Mustang—was edited and translated by Schuh (1994:69-78). We find there the names *Big-ram-sras* (= Vikramaśāhi) and *Bir-bā-dhur-sras* (= Vīrabahadurśāhi). The treatise opens by referring to the person of Balirāja, the founder of the Kallala dynasty (regnal years 1404-1445); see Schuh (1994:73).
It might be useful to point out that this name was used by Tibetan scholars generically to designate the ruler of this dynasty up to the 18th century. See Chos-kyi dbang-phyug, *Rig pa 'dzin pa chen po rdo rje tshe dbang nor bu'i zhabs kyis rnam par thar pa*, pp. 155.2-3: "... (this region,) which is part of India, (was ruled) in former times (by) the king of Ya-tshe (i.e. the Malla dynasty), and in his place, now, (by the ruler) called Balirāja. He puts faith in the philosophical teachings of the Tīrthikas and has brought twenty petty kingdoms under his rule. (This region) is known as Jumla..." (*rgya gar yul gyi cha / sngon tshe ya tshe rgyal po'i shul / da lta*

bā (= ba) li rā tsa zhes / phyi rol grub mtha' la mos shing / rgyal phran nyi shur dbang bsgyur ba / 'dzum lang grags pa).

12. Information concerning the rulers Vikramśāhi, Vīrabahadurśāhi and Vīrabhadraśāhi is given by Pandey (1971:42-44 and 45-46). Compare also the following statement on the "castles" from which they wielded their rule: "... between A.D. 1599 and 1719, we find about ten kings of the dynasty who had ruled the Jumla valley from its various castles (*kots*). Either due to revolution or division of the property (state) ..... each prince of the family had received a town along with the hills and the villages of its neighbourhood." (note: "The towns of late-medieval period in Western Nepal would not have been bigger than a modern village of the region."); ibid.: (42 and 58).

13. For the local traditions of Tichurong concerning king Vikram[a]śāh[i/a], see Fisher (1987:30): "... Bhadri Sah, who was in turn the father (by his Magar wife) of Vikram Sah, ... who is the only named historical figure generally remembered in Tichuring today. According to local legend, Vikram Sah ... was born in Yelakot ... below the Tichurong village of Gompa." On Yelakot/Yalakot as the old customs house before it was shifted downstream to Dunaih, see Fürer-Haimendorf (1975:208). Compare also Jest (1971:75): "Le seul personnage historique connu des Tichurong-pa est Bikram Saha ṭhakurī, roi de Jumla, qui a été le bienfaiteur des temples des *'bri-guṅ* et de *sa-'dul dgon-pa* où on conserve sa statue".

14. In Jackson (1984:150) we find the following characteristic of bSam-'grub dpal-'bar: "Everywhere, both within [Lo] and without, he sponsored the making of inconceivably many sacred images, books, and stūpas. Because he worshipped the [Three] Jewels with offerings, reverently served the monastic assembly, and was energetic in his meditations, he truly lived up to the name "religious king." The text on the renovation of the *Byams-pa lha-khang* bears the title *rGyal ba'i rgyal tshab byams mgon gtso 'khor gsum gyi sku bsnyen la gzungs bzhugs kyi dkar chags dngos grub kun 'byung*, 22 fols., NGMPP reel-no. L 143/2; for a first study of this text, cf. Gurung (1986).
The political dependancy of Mustang upon Jumla in the 17th and 18th centuries has been dealt with by Schuh (1994:68-85). According to the material presented there, the sovereignity of Jumla over Mustang was firmly established by at least the reign of Vīrabahādurśāhi (i.e. the 1630s) and lasted around 150 years.

15. For the mentioned detail of the renovation of 1690, see NYAMS-DBYANGS, pp. 43.5-44.1: *yang shing chad pas rta rong nas chu log rgyugs pas / rta rong lung pa'i shing thams cad chu rud kyi (= kyis) khyer yongs pas / sa 'dul gyi thang la shing khur stong len rgyu byung ngo*. The visit to the Kathmandu Valley can be found in ibid., pp. 102.2-107.5. On the way back O-rgyan bstan-'dzin spent some time in "*'Od-gsal sgang*, the residence of my own teacher" (*rang gi bla ma'i gdan sa 'od gsal sgang*); this refers to the site of *sKu-tshab gter-lnga* in southern Mustang. There he came upon the two statues of Padmasambhava which were kept in "both the upper and lower monasteries" (*dgon pa yas mas gnyis*) and had been "the sacred objects" (*nang rten*) of Kun-bzang klong-yangs. Mention is also made of the hermitage bearing the name *Zom-bu ri* in **Sum-'bag**; this toponym refers to present day Thini. For the stay of O-rgyan bstan-'dzin in *sKu-tshab gter-lnga* in the year 1699, see ibid., pp. 107.5-113.3.

16. The renovation work in the year 1700 is described in NYAMS-DBYANGS, pp. 125.5-134.4; for the difficulties to reach the spot, see ibid., p. 125.5 (*chu thags zhig thang la brtsugs pas dka' las shin tu che ba byung*). The text of the inventory can be found in ibid., pp. 126.4-129.4. The area in question is classified into an outer, inner and secret sacred site bearing the respective names *Sa-'dul dgon-pa*, *O-rgyan byang-chub phan* and *Thar-pa rtse*. This scheme is extended into a fivefold

classification (*sku gnas / gsung gnas / thugs gnas / yon tan gnas / phrin las gnas*) by adding the names — and places — *sTag-gyi rgyal-mtshan* and *rTa-gru dben-gnas*.
Chos-rje Dar-pa is identified as a siddha who came from the Kailāśa area to the valley of Tichurong; he sacralized the site of *Sa-'dul dgon-pa* by depositing soil and stones from holy places in India, Nepal and Tibet. According to Jest (1971:75) and (1975:309), a certain Bla-ma Zla-ba seng-ge for the first time erected a temple on that spot; this statement is not confirmed by the present sources. For the "hidden valley" as a concept of religious space in southern Mustang, see Ehrhard (in press a); cf. also Orofino (1991).

17. For the remark on Dolpo see NYAMS-DBYANGS, p. 166.2 (*sprang po'i bsam pa la chos rdzogs pa chen po 'di lngar (= sngar) dol phyogs su ma dar ba yin te*). The description of the pilgrimage to the Kailāśa area can be found in ibid., pp. 178.3-198.1, containing the short data on the royal court of Jumla, ibid., p. 181.1-2 (*rgyal chen bhi ri sras sogs 'dzum lang rgyal po thams cad kyis mthun rkyen mdzad*).
Concerning the mountain **Shel-mo gangs** there exists a guidebook by a certain Padma dngos-grub: *gNas chen shel mo gangs gi dkar chags mthong ba rang grol*. For the contact of Zhabs-dkar Tshogs-drug rang-grol (1781-1851) with the people from this area of Limi and the sacred mountain, cf. Ricard (1994:308, 321-328).

18. The local historical tradition concerning rituals and religious beliefs of the rNying-ma-pa school in **rTa-rab** is described by Jest (1975:305): "Le rituel actuel et la forme donnée aux pratiques religieuses à Tarap sont l'oeuvre de lama *u-rgyan bstan-'jin*: originaire de la vallée de la Barbung, il a été surnommé *sta-bru u-rgyan bstan-'jin* parce qu'il a longtemps séjourné en méditation l'ermitage de *sta-bru* au Sud de Lang. Il appartenait à l'ordre des *rjogs-chen-pa*." For the relocation of *Me-skyems dgon-pa* to the valley of **rTa-rab** under Pha-rgod rTogs-ldan rgyal-po, see ibid.: 308. This must have happened in the 17th century as O-rgyan bstan-'dzin mentions rTogs-ldan rgyal-po as one of his early teachers; NYAMS-DBYANGS, p. 36.4. The biography and spiritual songs of Pha-rgod rTogs-ldan rgyal-po were microfilmed by Klaus-Dieter Mathes and the NGMPP team during an expedition to Dolpo in the summer of 1995.

19. The activities in *'Bri-gung dgon-pa* are related in NYAMS-DBYANGS, pp. 239.2-260.3. The term "overseer" (*zhal bdag*) is also used for O-rgyan bstan-'dzin on the occasion of the second renovation of *Sa-'dul dgon-pa*; ibid., p. 126.3. For information on bsTan-'dzin ras-pa, his birthplace in the Muktināth valley, and his (re-)opening of the hidden valley **sKyid-mo lung** in the area of **sKu-thang**, see Ehrhard (1993a:25-26) and (in press a: note 14); cf. now Schuh (1995:42-44) for a translation of the genealogy of bsTan-'dzin ras-pa's family.
Concerning the lineage of the masters of **dMar-sgom**, which was founded by bSod-nams blo-gros (1516-1581), and the site of **Gra-lung**, the residence of rNam-grol bzang-po (born 1504), the teacher of bSod-nams blo-gros, see Ehrhard (in press b). The biographies translated by Snellgrove (1967) deal with four representatives of this tradition. For a modern-day description of the pilgrimage around **Shel-gyi ri-bo**, see Jest (1985). A guide- book is also available: *gNas mchog shel gyi ri bo 'brug sgra'i dkar chags mthong ba don ldan dad pa'i skya rengs*, 18 fols., NGMPP reel-no. E 2756/15.

20. For an ethnographic account of the village of **Glang**, see Jest (1975:70). A short résumé of the life of A-ni Chos-skyid can be found ibid.: 306-307 (note: "A Tarap, il n'existe pas de copie de la biographie de la religieuse. Les religieux de Tarap dansent sur le thème de la vie de méditation de *a-ni chos-skyid* (danse appelée chos-bro), lors des cérémonies du onzième mois à Nimaphug (à Doro) et à Mekyem." In the meantime a copy of this biography has been located in Tarap: *mKha' 'gro ma o rgyan chos skyid gyi rnam thar bsdus pa*, 51

fols., NGMPP reel no. L 401/3.
The following statement is made by O-rgyan bstan-'dzin in praise of the spiritual qualities of **rTa-gru**: "This sacred site—it is my hidden land .... The door to the sacred site (is) **Sa-'dul**, a place for giving (offerings). The inner part of the sacred site (is) **rTa-gru**, a place of pristine awareness." See NYAMS-DBYANGS, pp. 364.3-5: *gnas 'di ni nga yi sbas yul yin / ... / gnas sgo ni sa 'dul sbyin pa'i gnas / gnas nang ni rta gru ye shes gnas*, and RNAM-THAR, pp. 44.6-45.4 (with a different reading of the last line: *gnas nang ni lta (= rta) gru ting 'dzin gnas*).

21. On the itinerary of Rig-'dzin Tshe-dbang nor-bu before he reached *Sa-'dul dgon-pa* and his visits to the court of the king of Mustang and to Muktināth, see Ehrhard (1993a). For his stay in *Sa-'dul dgon-pa*, the following data are provided by Chos-kyi dbang-phyug (as in note 11), p. 147.2-3: "What is called *Sa-'dul*, the naturally arisen cemetery, this most excellent great sacred site which was blessed by the Tathāgatī Vajravarahī—for several days he stayed there and made extensive offerings (in the form) of sacrifical cakes for the Gaṇacakra ... All the commoners and the monastic community of that region bowed down to him in reverence ..." (*sa 'dul zhes rang byung gi dur khrod bcom ldan 'das ma rdo rje phag mo'i (= mos) byin gyis rlabs pa'i gnas mchog cher zhag shas bzhugs shing tshogs gtor gyi mchod pa rgya cher mdzad / .... yul de'i ser skya kun gyi (= gyis) gus par btud ....*).
At that time Rig-'dzin Tshe-dbang nor-bu also settled a military clash between "two petty states of the southern region" (*mon gyi rgyal khag gnyis*); see ibid., p. 147.5. This can only refer to Jumla and Parbat. For the next year, 1731, the autobiographical text of O-rgyan bstan-'dzin notes a war in which the states of Jumla, Parbat and Mustang were involved, costing many soldiers their lives; see NYAMS-DBYANGS, pp. 445.5-446.5.

Appendix:

The following two excerpts are taken (a.) from NYAMS-DBYANGS, pp. 423.4-425.1 (the identical passage in RNAM-THAR, pp. 53.6-56.3 is based on that) [=I], and (b.) from Chos-kyi dbang-phyug: *Rig pa 'dzin pa chen po rdo rje tshe dbang nor bu'i zhabs kyis rnam par thar pa*, pp. 148.1-6 [=II]. Concerning the second work it should be noted that the author used as one of his sources for the life-story of Kaḥ-thog Rig-'dzin Tshe-dbang nor-bu the autobiographical account *sNyims pa'i chu skyes*. This work is written in verses and covers the main events up to the year 1730; it was set down upon the special request of O-rgyan bstan-'dzin at the time of the meeting between the two masters. See the colophon: "Earlier, in the presence of Guru (Padmasambhava), (there was one) who was called g.Yu-sgra snying[-po], (now) his incarnation, O-rgyan bstan-'dzin by name, this Vajrācarya himself, he made continued strong exhortations, and in response to them, on the tenth day of the black moon in the iron-horse year [= the third Tibetan month of 1730], (I) Tshe-dbang nor-bu, the Vidyādhara who is known as Kaḥ-thog-pa, spoke." Ibid., p. 611.5-6 (*sngon tshe gu ru'i spyan snga ru // g.yu sgra snying zhes rnam sprul ni // o rgyan bstan 'dzin zhes bya ba // rdo rje slob dpon de nyid kyis // yang yang nan gyis bskul ngor // lcags kyi nag zla'i tshes bcu la // kaḥ thog par grags pa rig pa 'dzin // tshe dbang nor bu de yi smras*).

[I] "When (I) the old beggar was seventy-four, he who was the final rebirth of Nam-mkha' snying-po, from the region of Khams in the east, the one with the name

Great Vidyādhara from Kaḥ-thog, wandered about in India and Tibet in search of the holy Dharma. In the presence of many teachers with the three good qualities, he had abandoned the partiality of philosophical tenets, (and now) for his part he would ask for many instructions for (spiritual) ripening and liberation (i.e. inititations and teachings) from the nine yānas, the four classes of tantras and so on; on the other hand, upon many teachers and many (members of the) Saṃgha he would confer inititiations and teachings (in return). In every kingdom's realm he granted initiations for the multitude (i.e the general public).
Having arrived then in the regions of Mustang and Dolpo, and having taken up residence at the great sacred site of **Sa-'dul,** he conferred (spiritual) ripening and liberation upon all Tibetans and inhabitants of the gorges . To the old man from the great sacred site of **rTa-gru** he presented letters again and again, saying that he was in need of treasure-teachings, like *Zab tig [chos dbyings rang gsal]* and so on. Then the old beggar, O-rgyan-pa, said: "To you, the great teacher who has conferred initiations upon all the Indians and Tibetans, I am not about to give (further) initiations and teachings." Nevertheless, he sent requests again and again.
After that, in a spurt of energy, he went straightway to the great sacred site **rTa-gru**; (and) in (our) mutual encounters, many compliments and sermons were pronounced (by him). To him, I gave the five volumes of the profound treasures of the treasure-discoverer Gar-dbang [rdo-rje], and further, (treasure-cycles) like the *sPrul sku snying thig*: (all) the initiations, teachings and guidances of the Great Perfection etc. Upon me, he conferred the complete intitations and readings of the (treasure cycle) *[Klong gsal] mkha' 'gro snying thig*.[1]
Similes of the most excellent and pure harmony (between us): (we were) no different (from each other) than the sun from the sun, and (we) mixed (together) like milk in milk. In this way the prayer was made (by us) to meet again in a pure realm for all the lives of (future) rebirths."
sprang rgan bdun don bzhi'i dus / shar phyogs khams kyi sa phyogs nas / nam mkha'i snying po'i skyes mtha' zhig / ka (=kaḥ) thog rigs (= rig) 'dzin chen po zhes / sdam (= dam) chos 'tshol phyir rgya bod nyul / bla ma bzang gsum mang po la / sgrub (= grub) mtha'i phyogs ris spangs nas ni / tshur la theg pa rim dgu dang / rgyud sde bzhi la sogs pa yis (=yi) / smin grol gdam pa (= gdams pa) mang po zhus / phar la bla ma mang po dang /

[1] The *sPrul sku snying thig* is a cycle of treasure-teachings unearthed by Rig-'dzin bDud-'dul rdo-rje (1615-1672) of Khams. On the contacts between O-rgyan dpal-bzang—the first teacher of O-rgyan bstan-'dzin—and this treasure-discoverer, and the spread of his teachings in southern Mustang, see Snellgrove (1979:79-81) and Ehrhard (in press a). On the *Klong gsal mkha' 'gro snying thig* cf. the following note.

dge 'dun mang la dbang lung snang (= gnang) / rgyal khams kun la khrom dbang bskur / de nas glo dol phyogs su phebs / gnas chen sa 'dul sdan (= gdan) bzhugs nas / bod rong kun la smin grol snang (= gnang) / gnas chen lta (= rta) gru'i rgad po la / zab tig la sogs ster (= gter) chos rnams / dgos zhes bka' shog yang yang gnang / de nas sprang rgan o rgyan pas / rgya bod kun la dbang bkur (= bskur) ba'i bla ma chen po khyed nyid la / dbang lung 'bul ma mi yong byas / de bzhin zhu yig yang yang phul / de nas shugs 'byung spyad pa yis / gnas chen lta (= rta) grur thal 'byung phebs / mjal 'khrad (= 'phrad) 'brel (= 'bel) gtam mang po mdzad /phar la gter ston gar dbang gi / zab gter po ti lnga po dang / gzhan yang sprul sku snying thig sogs / rdzogs chen dbang lung 'khrid sogs 'phul / tshur la mkha' 'gro snying thig gi / dbang lung yongs su rdzogs pa gnang / thugs snang dag pa mchog gis (= gi) dpe / nyi ma nyi ma dbyer med dang / 'o ma 'o ma 'dres pa ltar / skye ba tshe rabs thams cad du / dag pa'i zhing du mjal smon btab.

[II] "At the age thirty-three years, in the iron-dog (year) called *Sādhāraṇa* [=1730], (Kaḥ-thog Rig-'dzin) arrived in **rTa-gru**, a part of the country of the south. There the one who was prophesied by the Mahācārya (Padmasambhava) as an incarnation of g.Yu-sgra snying-po, and who was a direct disciple of the treasure-discoverer Gar-dbang rdo-rje snying-po, (i.e.) his Dharma son, the most excellent among the siddhas, O-rgyan bstan-'dzin (by name), because of his wish for a meeting, was issued an invitation, and thus (Kaḥ-thog Rig-'dzin) arrived in **rTa-glang**.

(There) he listened to the initiations, guidances and teachings—(these) three in their entirety—of what had come forth as a treasure of Gar-dbang [rdo-rje] snying-po: *Zab tig chos dbyings rang gsal, Thugs rje chen po rtsa gsum snying thig, rDo rje phur pa spu gri reg gcod,* (and to the cycle called) *Thugs rje chen po 'gro ba kun grol* or *Nyon mongs rang grol* (of the tradition) of the "Northern Treasures"; and further, to the expounding of guidance for (the spiritual practice of) the rainbow body of (the system of) the honorable [sTag-sham] Nus-ldan [rdo-rje](born 1655). On the other hand, he gave the initiations, guidance and readings of what had come forth as a treasure of Padma bDe-chen gling-pa (1663-1713), (the cycle) *Klong gsal mkha' 'gro snying thig*. And he appointed (O-rgyan bstan-'dzin) with his own breath as master (of this teaching) of the sNying-thig (tradition).[2]

Again from **Sa-'dul** (Kaḥ-thog rig-'dzin) arrived by way of the **rTa** gorge at (the place called) *'Bum-pa*, the great sacred site of the teacher from O-rgyan [=

[2] For information on the treasure-discoverer Padma bDe-chen gling-pa, who was one of the teachers of Kaḥ-thog Rig-'dzin, and the unearthing of the cycle *Klong gsal mkha' 'gro snying*, see Ehrhard (1993b:87, note 17).

Padmasambhava] in lower **rTa-rab**, and stayed there for a while. From the dimension of the unmovable yoga of profound meaning, he made fall upon all striving disciples whatever stream (was necessary) for the way to complete liberation."[3]

dgung lo so gsum par thun mong te lcags kyi lor mon yul gyi cha rta grur byon / der slob dpon chen po'i (= pos) g.yu sgra snying po'i sprul par lung gis zin cing / gter ston gar dbang rdo rje'i snying po'i dngos slob chos sras dam pa grub mchog o rgyan bstan 'dzin nas mjal bzhed pas gdan 'dren byung ba bzhin rta glar (= glang) phebs / gar dbang snying po'i gter byon zab tig chos dbyings rang gsal dang / thugs rje chen po rtsa gsum snying thig / rdo rje phur pa spu gri reg gcod / byang gter thugs rje chen po 'gro ba kun grol lam / nyon mongs rang grol gyi dbang khrid lung gsum tshang ba / nus ldan zhabs kyi 'ja' sku'i khrid bka' yang gsan / phar la padma bde chen gling pa'i gter byon klong gsal mkha' 'gro snying thig gi dbang khrid lung bcas stsal zhing snying thig gi bdag por dbugs byung mnga' gsol bar mdzad / slar yang sa 'dul nas rta rong rgyud (= brgyud) de rta rab smad o rgyan gu ru'i gnas chen 'bum par byon te re zhig bzhugs / zab don gyi rnal 'byor g.yo ba med pa'i ngang nas gdul bya don gnyer can dag la rnam grol lam gyi chu bo'i rgyun ci yang 'beb par mdzad do.

[3] The place where Kaḥ-thog rig-'dzin stayed in lower Tarap is known today under the name *Ri-bo 'bum-pa*. On the legends which associate the site with Padmasambhava see Jest (1975: 43 and 298). There is also a guidebook available: no title, 10 fols., NGMPP reel-no. L 415/3. It can be dated to the 18th/19th centuries.

Bibliography

Tibetan Literature

Kun-bzang klong-yangs (1644-1696)
rTogs brjod mu tig gi mchun bu (= chun po) zhes pa'i gtam, 93 fols., NGMPP reel-no. L 406/2.

rGyal-dbang seng-ge (born 1628)
Bya btang 'od zer rgya mtsho'i rnam thar nges don rgya mtsho'i snying po, 61 fols., NGMPP reel-no. L 452/4.

Chos-kyi dbang-phyug, Brag-dkar rta-so sPrul-sku (1775-1837)
Rig pa 'dzin pa chen po rdo rje tshe dbang nor bu'i zhabs kyis rnam par thar pa'i cha shas brjod pa ngo mtshar dad pa'i rol mtsho, 186 fols., in "Collected Works of Kaḥ-thog Tshe-dbang nor-bu", vol. I, pp. 1-376, Dalhousie: Damchoe Sangpo, 1976.

Tshe-dbang nor-bu, Kaḥ-thog Rig-'dzin (1698-1755)
Ma bcos pa'i zog po sngags rig 'dzin pa tshe dbang nor bu rang nyid spyad rab chu klung las thig pa tsam kyu ru lugs su smos pa snyims pa'i chu skyes, 26 fols., in "Collected Works of Kaḥ-thog Tshe-dbang nor-bu", vol I, pp. 561-612, Dalhousie: Damchoe Sangpo, 1976,

Lo-chen Dharmaśrī (1654-1717)
gTer chen chos kyi rgyal po'i rnam thar dad pa'i shing rta, 177 fols., in "The Life of gTer-

bdag gling-pa 'Gyur-med rdo-rje of sMin-grol gling", vol. I, pp. 1-354, Paro: Lama Ngodrub and Sherab Drimey, 1982.

O-rgyan dpal-bzang (1617-1677)

Rigs brgya dbang po 'dren mchog slob dpon dpal bzang po'i rnam par thar pa dad pa'i spu long g.yo byed mthong bas yid 'phrog ngo mtshar 'phreng ba'i gtam rmad du byung ba, 309 fols. (incomplete), NGMPP reel-no. L 83/1.

O-rgyan bstan-'dzin (1657-1737)

bKa' rdzogs pa chen po zab tig chos dbyings rang gsal las phyag rgya chen po gnyug ma gcer mthong gi khrid, 127 fols., Delhi: Lama Dawa, 1983.

- *rNal 'byor gyi dbang phyug o rgyan bstan 'dzin zhes bya ba'i ri khrod kyi nyams dbyangs*, 227 fols., n.p., n.d. (= NYAMS-DBYANGS).
- *Phrang rgan o rgyan bstan 'dzin pas rnam thar bsdus pa*, 95 fols., n.p., n.d. (= RNAM-THAR).

anonymous

Bla ma rin po che sbas pa'i rnal 'byor pa chen po thub bstan dbang po'i rnams (= rnam) thar ngo tshar (= mtshar) smad (= rmad) 'byung (= byung), 31 fols. (incomplete), NGMPP reel-no. L 123/2.

Western Literature

Ehrhard, F.K. (1993a). "Tibetan Sources on Muktināth. Individual Reports and Normative Guides," *Ancient Nepal. Journal of the Department of Archaeology*, 134, pp. 23-41.

- (1993b). "Two Documents on Tibetan Ritual Literature and Spiritual Genealogy," *Journal of the Nepal Research Centre*, 9, pp. 77-100.
- (in press a). "Concepts of Religious Space in Southern Mustang: The Foundation of the Monastery sKu-tshab gter-lnga." Forthcoming in *Giessener Geographische Schriften*, 75.
- (in press b). "Two Further Lamas of Dolpo: Ngag-dbang rnam-rgyal (born 1628) and rNam-grol bzang-po (born 1504)." Forthcoming in *Journal of the Nepal Research Centre*, 10.

Fisher, J.F. (1987). *Trans-Himalayan Traders. Economy, Society, and Culture in Northwest Nepal*. New Delhi.

von Fürer-Haimendorf, C. (1975). *Himalayan Traders. Life in Highland Nepal*. London (reprint: New Delhi 1988).

Gurung, J. (1986). "Jyampā (vyaṃs-pa) gumbāko karchyāgmā ullekhita ti thimitiharu: blo (mustāṅ) rājyako etihasika kālakrama-eka carcā," *Contributions to Nepalese Studies*, 13(2), pp. 215-237.

Jackson, D.P. (1984). *The Mollas of Mustang. Historical, Religious and Oratorical Traditions of the Nepalese-Tibetan Borderland.* Dharamsala.

Jest, C. (1971). "Traditions et croyances religieuses des habitants de la vallée de Tichurong (Nord-Ouest du Nepal)," *L'Ethnographie*, 65, pp. 66-86.

- (1975). *Dolpo. Communautés de langue tibétaine du Nepal*. Paris.
- (1985). *La Turquoise de vie. Un Pèlerinage tibétain*. Paris.

Klimburg-Salter, D.E. (1991). "The Tucci Himalayan Archive," *East and West*, 41(1-4), pp. 379-383.

Orofino, G. (1991). "The Tibetan Myth of the Hidden Valley in the Visionary Geography of Nepal," *East and West*, 41(1-4), pp. 239-271.

Pandey, R.N. (1970). "The Kallala Dynasty of the Jumla Valley," *Ancient Nepal. Journal of the Department of Archaeology*, 12, pp. 45-52.

- (1971). "The History of the Kallala Dynasty," *Ancient Nepal. Journal of the Department of Archaeology*, 15, pp. 39-61.

- (1996). "Buddhist Monuments of Western Nepal," *Journal of Nepalese Studies*, 1(1), pp. 87-99.

Ricard, M. (1994). *The Life of Shabkar. The Autobiography of a Tibetan Yogin*. Albany.

Schuh, D. (1994). "Investigations in the History of the Muktināth Valley and Adjacent Areas, Part I," *Ancient Nepal. Journal of the Department of Archaeology*, 137, pp. 9-91.

- (1995). "Investigations in the History of the Muktināth Valley and Adjacent Areas, Part II," *Ancient Nepal. Journal of the Department of Archaeology*, 138, pp. 5-54.

Sharma, P.R. (1972). *Preliminary Study of the Art and Architecture of the Karnali Basin, West Nepal*. Paris.

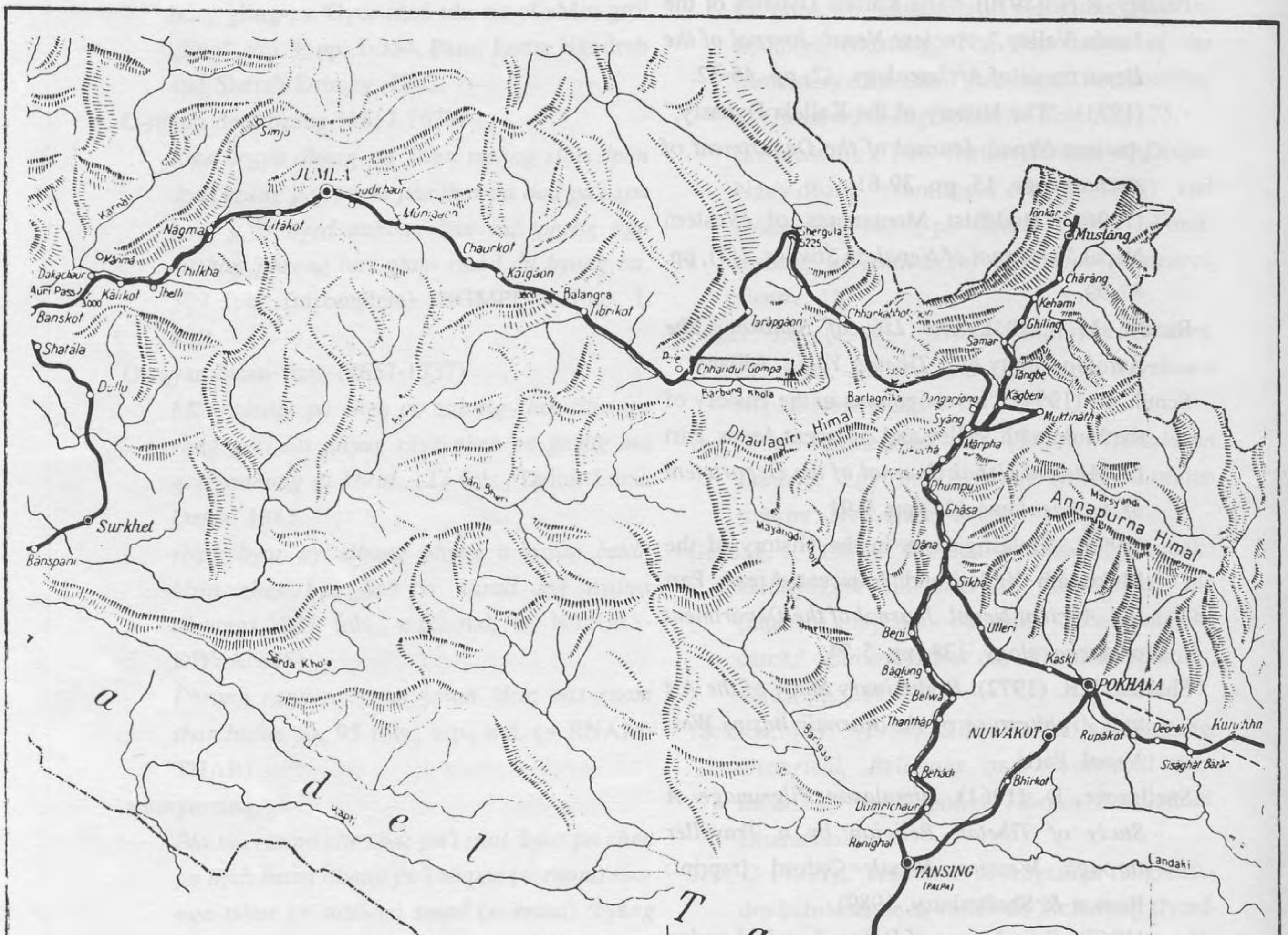
Snellgrove, D. (1961). *Himalayan Pilgrimage. A Study of Tibetan Religion by a Traveller through Western Nepal*. Oxford (reprint: Boston & Shaftesbury, 1989).

- (1967). *Four Lamas of Dolpo*. 2 vols. London (reprint of vol. 1: Kathmandu 1992).

- (1979). "Places of Pilgrimage in Thag (Thakkhola)," *Kailash. A Journal of Himalayan Studies*, 7(2), pp. 75-170.

Tucci, G. (1956). *Preliminary Report on Two Scientific Expeditions in Nepal*. Serie Orientale Roma X / Materials for the Study of Nepalese History and Culture 1. Rome.

- (1962). *Nepal: The Discovery of the Mallas*. London.



Sketch map of my itineraries in Nepal.

Fig. 1

Fig. 2

HOUSES AND HOUSEHOLDS IN SOUTHERN MUSTANG

—John Harrison and Charles Ramble

The Tibetan term *khangba* (Tib. *khang-pa*), literally meaning "house", is an imprecise expression as used in Mustang. It designates any residential building as well as the individual rooms a house contains (the Central Tibetan word for room, *khangmig*, Tib. *khang-mig*, is not used); it may also be used to signify the social and economic unit, the family, that owns or inhabits the house. Houses are not only material constructions but have important social and religious aspects, both with respect to the organisation of their space as well as to the way in which they relate to the other houses that constitute a given community.

In this paper one house will be examined in some detail to illustrate the interrelation between the physical form of the building and its social and religious use. Angyal Gurung's family house[1] in the village of Dzar (Nep. Jharkot), in the Muktinath Valley, stands beside the large gateway chorten, or *kennen* (*rkang-gnyis*) whch bridges the pilgrim road to Muktinath, at the southern edge of the settlement area overlooking the fields. The house was built some forty years ago (ca. 1950) by Angyal's father when he married and started a family, and so had to move out of the old family house beside the castle in the centre of the village. The new house was located on a former threshing ground, *ulza* (Tib. *g.yul-sa*), and forms part of a gradual outward growth of the dense village core along and across the Muktinath trail. Expansion to the north and west of the village was inhibited by the precipitous drop to the river on those sides. In recent years this growth on the south side of the village has accelerated as accommodation is provided for Western trekkers as well as Hindu and Buddhist pilgrims. New development is also likely to be built

[1] John Harrison wishes to thank Angyal Gurung for providing much of the information in this section of the present article, and for his patience in answering so many questions. The authors are grateful to Niels Gutschow for his permission to reproduce a number of his drawings.

at a lower density, with isolated buildings set in gardens occupying proportionately more of the productive agricultural land.

Angyal Gurung's house is a compact two-storey block (with additional accommodation added on the roof), with two external walls and two sides built against adjoining properties. In contrast to the wall construction most commonly employed in this area - rammed-earth in a wooden formwork[2] - the new house was built with mud blocks to speed its erection. The rear wall however is formed by the front wall of an earlier house behind, and this building does have rammed-earth walls on a stone foundation.

Because of the restricted site, and perhaps for reasons of cost, or conservatism, there is no central courtyard although many houses built during the last hundred years in Kag (Nep. Kagbeni) and Gelung for instance, and in Dzar itself, have adopted the courtyard plan of the rich Thakali traders of Tukche and Marpha.[3] Here there are simply small openings in the floors for the steps or ladder connecting the different levels.

The front of the house faces the Muktinath road; an alleyway around the end of the building leads up to the centre of the village. From the street stone steps lead up to the only doorway, with double pivotted doors and a simple block-decorated (Tib. *bab-skyangs-bskums*) lintel above:[4] the entrance to both the living accommodation on the upper floor and the animal stables on the ground floor. Hanging just inside the door are some dried rabbit heads: protectors to ward off malevolent spirits. A variety of animals may be used for this - eagles, hawks, polecats are some examples, but not more benign creatures such as partridges or pigeons.

Another protective device often found over the outside of the entrance door is the *namgo* (Tib. *nam-sgo*), the "sky-door" symbol, or the *sago* (Tib. *sa-sgo*), the "earth door".[5] The *namgo* is a sheep's skull sewn in cotton cloth and surrounded by diamond-shaped webs of threads tied to cross frames. The *sago* is similar but is based on a dog's skull. The choice of either *namgo* or *sago* will be made by the ritual specialist appointed by the householder, depending on where threats to the house are seen to lie. *Hrungma* (Tib. *srung-ma*), "protectors", small paper prints of appropriate motifs obtained from the local temple or from a lama who has the necessary printing blocks, may also be fixed over the doorway.

Continuing into the building, the wooden staircase, *gyatre* (*rgya-skras*) to the upper floor is located immediately to the left, and the remainder of the ground floor is occupied by storage and animal quarters. Firewood is stacked to the right of the door, and in a larger area against the back wall with a raised floor, *shiri* (*shing-ri*). An alcove houses agricultural implements, and the animals - goats and cattle (yak crossbreeds) - are secured beyond a door to the left in the goat-pen, *rabug* (*ra-bug*). The furthest enclosed room is a store, *tsabrag* (*rtswa-rags*), for hay and dried fodder. Cattle will return to the stable each night while

[2] For further information on rammed-earth construction, or *pisé de terre,* see Harrison in press a.

[3] For an examination of Thakali buildings, see Blair 1983; Morrillon and Thouveny 1981; Sestini and Somigli 1980.

[4] For further details on traditional woodwork construction and decoration, see Jackson 1979: 37.

[5] *Nam-sgo*; for a recent discussion of this device see Dollfus 1994.

they are pastured near the village, which may be the year round. The disposition of structural walls and columns on the ground floor would appear to be determined by the layout of the rooms above - particularly the need for a large living room, *khangbache* (Tib. *khang-pa-che*, lit. "big room"), and an enclosed shrine room, *chökhang* (Tib. *mchod-khang*) - rather than by the less specific space requirements of stables and stores. The square wooden columns and capitals in front of the woodstore and facing the entrance, apparently older and of better quality than other joinery, are probably reused from an earlier building, perhaps the demolished house of an uncle of Angyal.

The staircase leads to a landing on the first floor outside the living room, and to a notched log ladder, *trewa* (Tib. *skras-pa*), up to the roof. Partially screened from the staircase (for draughts, not privacy) is a kitchen, *goga* (Tib. *go-kha*), and sitting area for summer use, with three small windows on the southwest street frontage. The windows have wooden shutters, but the roof opening for the ladder cannot be closed.

The winter kitchen/ living room, *khang-bache*, occupies the centre of the upper floor, with the summer kitchen and shrine room at one side and storerooms at the other. There is one small window to the street and a central smoke-hole to the roof above. Two square wooden colums with simply-carved bracket capitals support a squared beam running the length of the room, and pole rafters above. The principal feature of the room is the formal mud-built hearth *thab* (Tib. *thab*), projecting from the farther wall, with mud sitting-platforms to each side. On shelves behind and to one side of the hearth are arranged rows of polished copper and steel pots and dishes (fig. 7).

The hearth seen here conforms to a basic design which is found, with many minor variations, over a wide area along the upper Kali Gandaki and in neighbouring regions. The Dankardzong kitchen (fig. 6) shows a modern variant where the iron tripod has been replaced by an enclosed tin stove and stovepipe, but with the stove, like the wooden shelves, still moulded into the mud base with layers of red earth. This red wash, *tsagmar* (Tib. *btsag-dmar*) is applied quite frequently to floors and the lower parts of walls and fittings throughout the living areas, forming a dado some 70 to 100 cm high around the rooms. The whitewash on the upper parts of the walls *tsagkar* (Tib. *btsag-dkar*) is usually redone only on special occasions such as weddings, retirement ceremonies or New Year.

The hearth is the central point around which the family gathers in the long winters. Survival depends on the warmth of the fire and the food cooked on it, and the hearth consequently has a sacred character, presided over by its own god, Thab-lha dkar-po.[6] The hearth is the very centre of the house, in much more than the physical sense. Cosmologically it is where the two axes of the Tibetan universe, horizontal and vertical, intersect. The way in which the vertical dimension of a house is represented corresponds to well-known models for the representation of the universe: beneath the house are the serpent spirits who are propitiated annually in important houses - such as the royal palace of Lo Monthang - with offerings of grain that are dug into the earth of the stables. When a house is built, an astrologer or lama first consults the stars to settle an appropriate day for the first act. This is a ritual involving burying a small quantity of barley at the site. The barley is

[6] For a discussion of Thab-lha and other household gods, see for example Tucci (1980: 187ff).

they are pastured near the village, which may be the year round. The disposition of structural walls and columns on the ground floor would appear to be determined by the layout of the rooms above - particularly the need for a large living room, *khangbache* (Tib. *khang-pa-che*, lit. "big room"), and an enclosed shrine room, *chökhang* (Tib. *mchod-khang*) - rather than by the less specific space requirements of stables and stores. The square wooden columns and capitals in front of the woodstore and facing the entrance, apparently older and of better quality than other joinery, are probably reused from an earlier building, perhaps the demolished house of an uncle of Angyal.

The staircase leads to a landing on the first floor outside the living room, and to a notched log ladder, *trewa* (Tib. *skras-pa*), up to the roof. Partially screened from the staircase (for draughts, not privacy) is a kitchen, *goga* (Tib. *go-kha*), and sitting area for summer use, with three small windows on the southwest street frontage. The windows have wooden shutters, but the roof opening for the ladder cannot be closed.

The winter kitchen/ living room, *khangbache*, occupies the centre of the upper floor, with the summer kitchen and shrine room at one side and storerooms at the other. There is one small window to the street and a central smoke-hole to the roof above. Two square wooden colums with simply-carved bracket capitals support a squared beam running the length of the room, and pole rafters above. The principal feature of the room is the formal mud-built hearth *thab* (Tib. *thab*), projecting from the farther wall, with mud sitting-platforms to each side. On shelves behind and to one side of the hearth are arranged rows of polished copper and steel pots and dishes (fig. 7).

The hearth seen here conforms to a basic design which is found, with many minor variations, over a wide area along the upper Kali Gandaki and in neighbouring regions. The Dankardzong kitchen (fig. 6) shows a modern variant where the *iron* tripod has been replaced by an enclosed tin stove and stovepipe, but with the stove, like the wooden shelves, still moulded into the mud base with layers of red earth. This red wash, *tsagmar* (Tib. *btsag-dmar*) is applied quite frequently to floors and the lower parts of walls and fittings throughout the living areas, forming a dado some 70 to 100 cm high around the rooms. The whitewash on the upper parts of the walls *tsagkar* (Tib. *btsag-dkar*) is usually redone only on special occasions such as weddings, retirement ceremonies or New Year.

The hearth is the central point around which the family gathers in the long winters. Survival depends on the warmth of the fire and the food cooked on it, and the hearth consequently has a sacred character, presided over by its own god, Thab-lha dkar-po.[6] The hearth is the very centre of the house, in much more than the physical sense. Cosmologically it is where the two axes of the Tibetan universe, horizontal and vertical, intersect. The way in which the vertical dimension of a house is represented corresponds to well-known models for the representation of the universe: beneath the house are the serpent spirits who are propitiated annually in important houses - such as the royal palace of Lo Monthang - with offerings of grain that are dug into the earth of the stables. When a house is built, an astrologer or lama first consults the stars to settle an appropriate day for the first act. This is a ritual involving burying a small quantity of barley at the site. The barley is

[6] For a discussion of Thab-lha and other household gods, see for example Tucci (1980: 187ff).

consecrated by a lama, and is called *lame chagne* (Tib. *bla-ma'i phyag-nas*), "barley from the lama's hand". The act of burying it is seen as a means of subduing the soil. And when the hearth is installed on the upper living floor, sheep horns and jewels are built in beneath it. On top of the house are the gods, who reside in small shrines, shaped and painted in a distinctive way that makes it possible to identify the resident divinity (see below). Variations on this triadic division occur in other ceremonial contexts. In a ritual performed in Khyenga, the village priest recites a long prayer which includes the following lines:

> May the top floor of our houses
> be full of people;
> May the middle floor of our
> houses be full of grain;
> May the ground floor be full of
> cattle.[7]

Within the microcosm of the house the division of space along the horizontal plane is based on gender. Seating is usually on either side of the hearth, with women occupying the left, or "female" row, *yöndral* or *modral* (Tib. *g.yon-gral, mo-gral*), and men in the right, or "male", row, *yädral* or *phodral* (Tib. *g.yas-gral, pho-gral*). Certain rooms are also situated in accordance with this binary division. Thus the storeroom, used primarily by women, is generally to the left of the hearth, while the shrine room, a male province, is to the right.

To the left of the *khangbache* are two storerooms, *dzibug* (*mdzod-sbug*), the further one nearest to the hearth reserved for food, such as sacks of barley and dried vegetables, and the store at the front of the house containing chests of material possessions and valuables. To the right of the *khangbache* at the rear of the house, is the door, its frame carved with the common motifs of the lotus, *pema* (Tib. *padma*) and dharma stack, *chötsek* (Tib. *chos-brtsegs*),[8] into the shrine room, *chökhang*. There is a single column in the centre of the room with a carved capital supporting a beam and the roof structure, a simple altar for small statues and offering bowls, and to one side a low table and suspended drum behind which the officiant will sit for ceremonies. Daily offerings are made by the family and special ceremonies are conducted by either a Sakyapa monk from the gompa, a Nyingmapa nun (in this case, the daughter of the lama of Muktinath) or by the Bonpo Tshampa Takla, according to the nature of the ritual that is to be performed. The size and decoration of shrine rooms varies widely, depending on the wealth and inclination of the householder. This example in Dzar is quite simply appointed, although there is a separate room set aside; the altar may also be found in the corner of the living room or in a storeroom, or at the other extreme it may be a richly furnished apartment with wall-paintings, thangkas, decorated tables and cupboards for statues and scriptures. The Red

[7] Most houses in Mustang are now only two storeys high but this verse suggests that three storeys might formerly have been the norm. This is substantiated by the older and mostly ruined part of Khyenga itself. In Kag, too, the three-storey houses are found in the sixteenth-century core of the village, while nineteenth- and twentieth-century house are invariably two storeys high.

[8] For further details on traditional Tibetan woodwork construction and decoration, see Thubten Legshay Gyatsho 1979: 37.

House in Kag[9] contains a colossal seated figure of Maitreya Buddha framed by a baroque *torana*; and the shrine room of the Bonpo lama Tshampa Takla in Dzar even has a separate ante-chamber, *gumzur,* (lit. place where shoes are removed).

The flat roof over the first floor accommodation is open at the front of the building, towards the street, with an open-fronted shelter, *yab* (Tib. *g.yab*), or *kyangyab* (Tib. *skyang-g.yab*), at the rear. This is used as a winter shelter for sitting in the sun, or for the emergency storage of crops if rain comes on when they are spread to dry on the roof. The smoke-holes or skylights which light the *khangbache* and *chökhang* below are set under the front of the *yab* roof to protect them from rain. At the western end of the roof an enclosed room was built later than the rest of the house. It is used as a guest room, or store, or for drying meat. The poor insulation of the single mud brick walls means that it is too cold to occupy in winter. Firewood is neatly stacked along the front edge of the roof to form a parapet. In some cases, as in Marpha houses, the firewood has become a permanent feature, plastered into place over the years; and in a further development, seen at the Red House, Kag, and on many gompas, a purely decorative skin of trimmed brushwood, *drolo,* is set into the outer face of a masonry parapet.

In the centre of the front parapet stands a three-sided *tsenkhang* (Tib.*btsan-khang*), the shrine dedicated to a *btsan,* in this case the household protector Dungmara ([A-bse] mdung-dmar). The *tsenkhang* is a miniature house, with a roof, eaves of brushwood (*drolo*), the main body of the house and a hole into a cavity containing figures of sheep, yaks and goats moulded in tsampa which are ceremonially renewed each year. The *tsenkhang,* like a chorten, is built around a central pole, *hrokshing* (Tib. *srog-shing*), the "tree of life", which emerges through the roof, surrounded by twigs of sacred juniper, *shukpa* (Tib. *shug-pa*). *Tsenkhang* may be square or triangular in plan, red or white (or both) in colour and may vary in the details of the design depending on the particular divinity, and will be located and oriented on the roof to deflect malignant forces expected from a particular direction.

Another protective shrine is also set in the parapet: the *rigsum gönpo* (Tib. *rigs-gsum mgon-po*), the "protectors from the three families". This consists of three small chorten painted red, blue (or black) and white, dedicated respectively to Manjusri, Vajrapani and Avalokitesvara. Prayer flags on vertical poles, *darcog* (Tib. *dar-lcog*), six in number, are supported by the edge of the *yab* roof.

There is a close, but not exact, correspondence, between houses and households, that is, the socially relevant units into which houses are divided or clustered. Households are of different kinds, and a brief typology may be given here. The main category of household is the *drongba* (Tib. *grong-pa*), or estate. An estate essentially consists of a house and an area of agricultural land, although there are certain exceptions. The smallest category of household is the hearth, called *meptra* (Tib. *me-khral,* meaning "hearth [lit. fire] tax"). The term "hearth" is also used to designate the landless dependency of an estate. This type of hearth usually consists of a part of the main house, inhabited by relatives of the household head. The tenant in question may be the householder's aged parents who have retired from public life, or an

---

[9] For a detailed discussion of this building, see Harrison in press *b*.

unmarried sister, or a divorced female relative who has returned to her parental home. The first of these households is referred to as a *gentshang* (Tib. *rgan-tshang*), "elders' quarters". The second are known as *phorang-morang* (Tib.*pho-rang mo-rang*), "men/ women on their own". Such households are not inherited separately but revert to the main estate on the death of the occupants.

Another category of household which should be mentioned is the *khaldura* (*kha-'thor-ba* or *kha-'thor 'thor-ba*), "scattered part" or "fragment". The meaning of this term varies considerably from one village to another in Baragaon. In Chongkhor, for example, the *khaldura* were probably created by younger brothers who had no wish to participate in a polyandrous marriage, and therefore forefeited their rights to the usufruct of their parents. The founder of a *khaldura* household marries separately from his brothers and, with sufficient industry and luck, builds or buys a house and purchases fields. The name *khaldura* implies a degree of poverty and inferior standing, but they can in theory acquire considerable wealth and prestige. Some decades ago in Chongkhor, the subsidiary households were able to form a persuasive lobby who demanded similar rights to those of the estates. A consequence of this dispute is that, at the present time, the headmen of Chongkhor are recruited *exclusively* from the subsidiary households. In Khyenga, where the meaning of *khaldura* seems to be similar to that in Chongkhor, the category was dissolved altogether at the beginning of the Panchayat era: the community gave each of its *khaldura* an area of land and the right to build a house. Thenceforth they were classified as full estates, and were required to help shoulder the burden of increased civic duties that had come in the wake of the political changes. In Kag, the term *khaldura* is applied primarily to an estate that has no land, or very little land, attached to it, and as such pays its local land tax at the same rate as a hearth. The expression *khaldura* is also sometimes used of non-estate households, whether an "elders' quarters" (*gentshang*) or a "solitary householder", but only if the residents include a male member. In other villages such as Te (Nep. Tetang), by contrast, the term *phorang-morang* includes the *khaldura* category, and the word *khaldura* is never used.

It is the estate that is the single most important unit in the constitution of village organisation. Some of the functions of estates may be listed here by way of illustration. Traditionally, only estates had rights to water for irrigation, and subsidiary households depended for their water supply on estates with whom they had family ties. Only the principal women, *khyimbamo* (Tib. *khyim-ba-mo*, "house mistress"), were permitted to wear turquoise and gold headpieces and participate in certain ceremonial dances; only estates could provide personnel to hold community offices; and the provision of monks and certain categories of offerings to the monastery, and of victuals, firewood, beer and so forth to visiting officials was limited to estates.

References

Blair, K.D. 1983. "Four villages: architecture in Nepal". Los Angeles: Craft and Folk Art Museum.

Dollfus, P. 1994. "'Porte de la Terre, Porte du Ciel', un rituel de rançon au Ladakh". In P. Kvaerne (ed.), *Tibetan Studies*. Proceedings of the Sixth Seminar of the International Association for Tibetan Studies, Fagernes 1992. Oslo: Institute for Comparative Research in Human Culture.

Harrison, J. in press *a*. "Rammed-earth construction in Mustang". (To appear in a collection of articles on the subject of Kagbeni, published by the University of Giessen.)

in press *b*. "The Red House, Kagbeni". (To appear in a collection of articles on the subject of Kagbeni, published by the University of Giessen.)

Morillon, F. and P. Thouveny 1981. "Settlements and houses in Thak Khola". In G. Toffin (ed.), *L'Homme et sa Maison en Himalaya.* Paris: Editions du CNRS.

Sestini, V. and E. Somigli 1980. "Contributo alla conoscenza e alla tutela dell' architettura Thakali", *Club Alpino Italiano, Bolletino* 83.

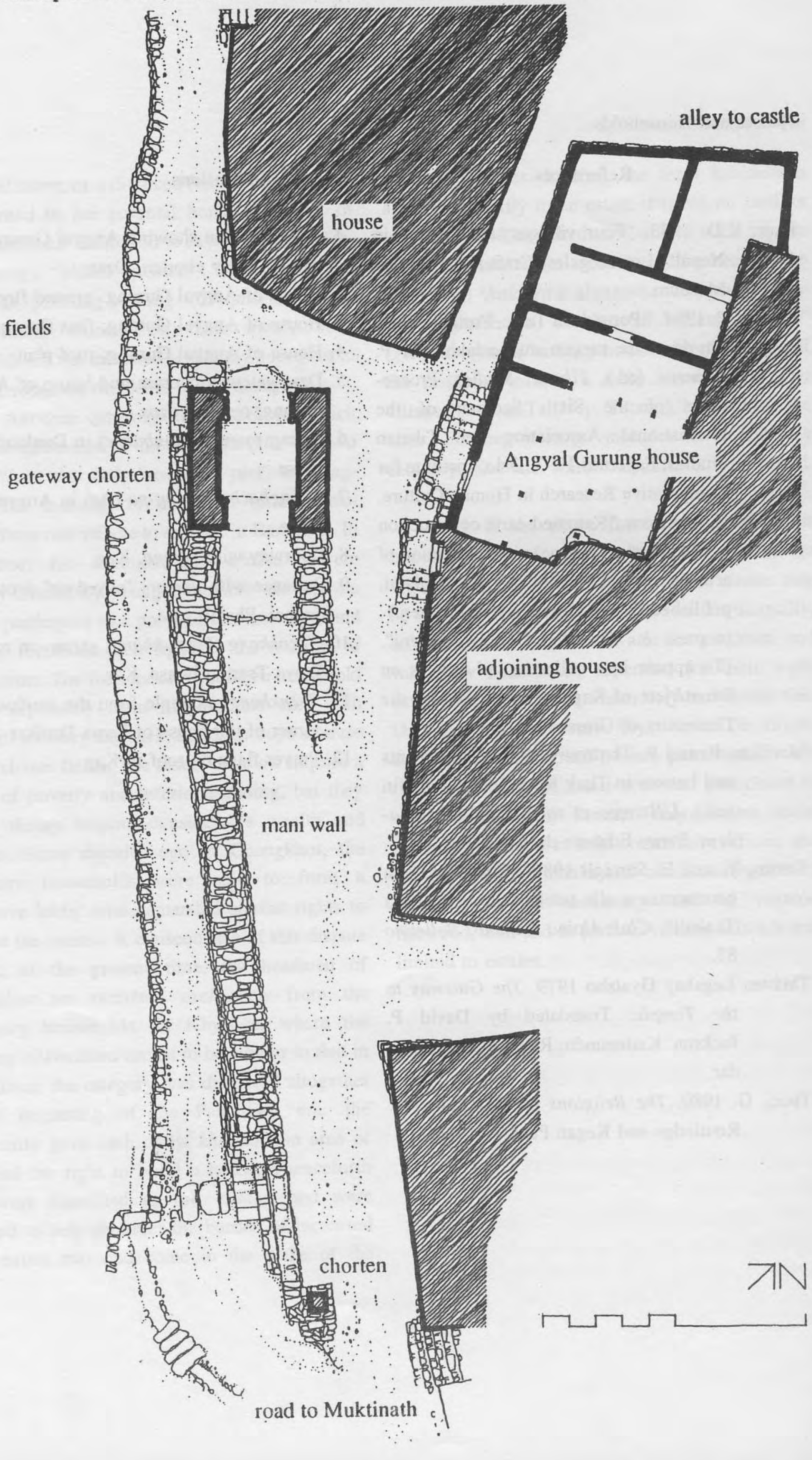
Thubten Legshay Gyatsho 1979. *The Gateway to the Temple.* Translated by David P. Jackson. Kathmandu: Ratna Pustak Bhandar.

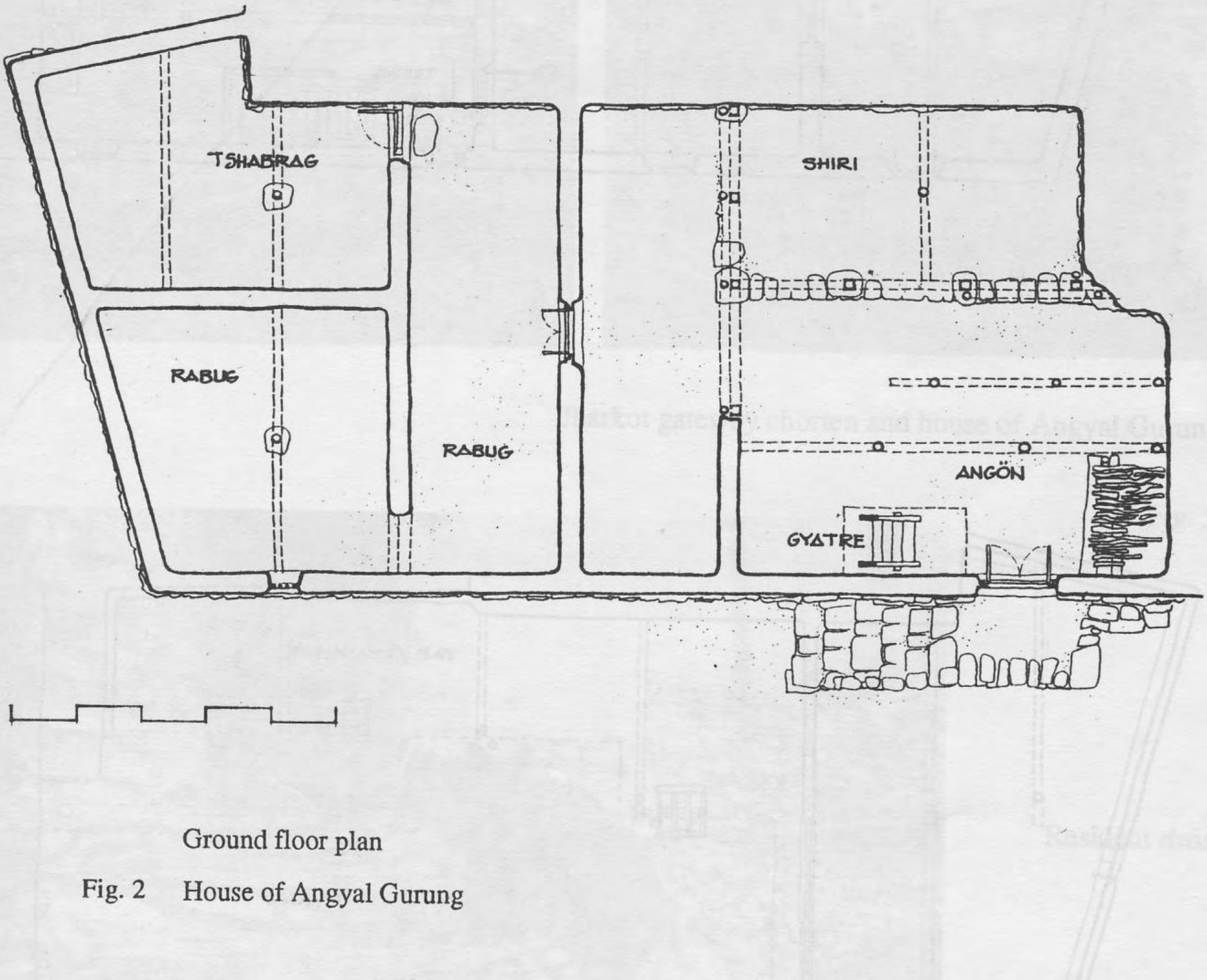
Tucci, G. 1980. *The Religions of Tibet.* London: Routledge and Kegan Paul.

List of illustrations

1. Location plan showing Angyal Gurung house and gateway chorten, Dzar
2. House of Angyal Gurung: ground floor plan
3. House of Angyal Gurung: first floor plan
4. House of Angyal Gurung: roof plan
5. Dzar gateway chorten and house of Angyal Gurung; resident *dzos*
6. Living room (*khangbache*) in Dankardzong house
7. *Khangbache* (*khang-pa-che*) in Angyal Gurung house
8. Doorway with *namgo,* Kag
9. Entrance with *namgo,* "sky-door" protective symbol, Phelak
10. *Tsenkhang* (*btsan-khang*) shrine on roof of Waya Tsering house, Kag
11. *Tsenkhang*: example from the southwestern corner of the house of Pema Drolkar
12. Prayer flags on roof in Kag

Fig. 1 Location plan showing Angyal Gurung house and gateway chorten, Dzar





Ground floor plan

Fig. 2 House of Angyal Gurung

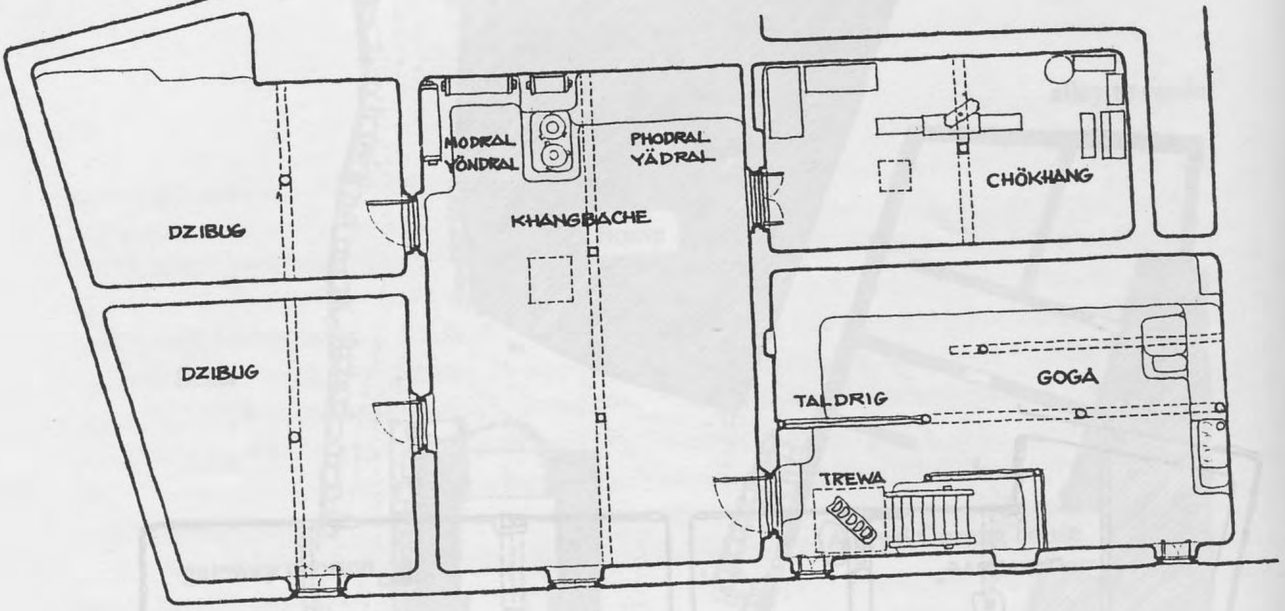
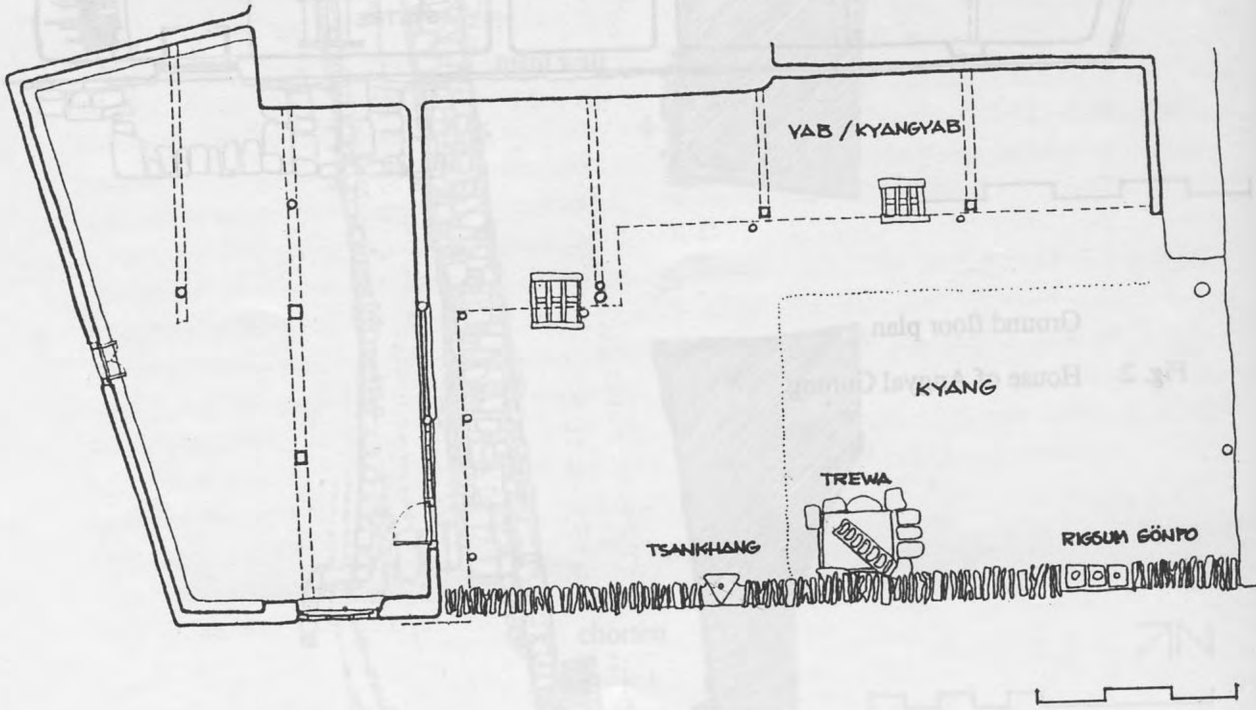
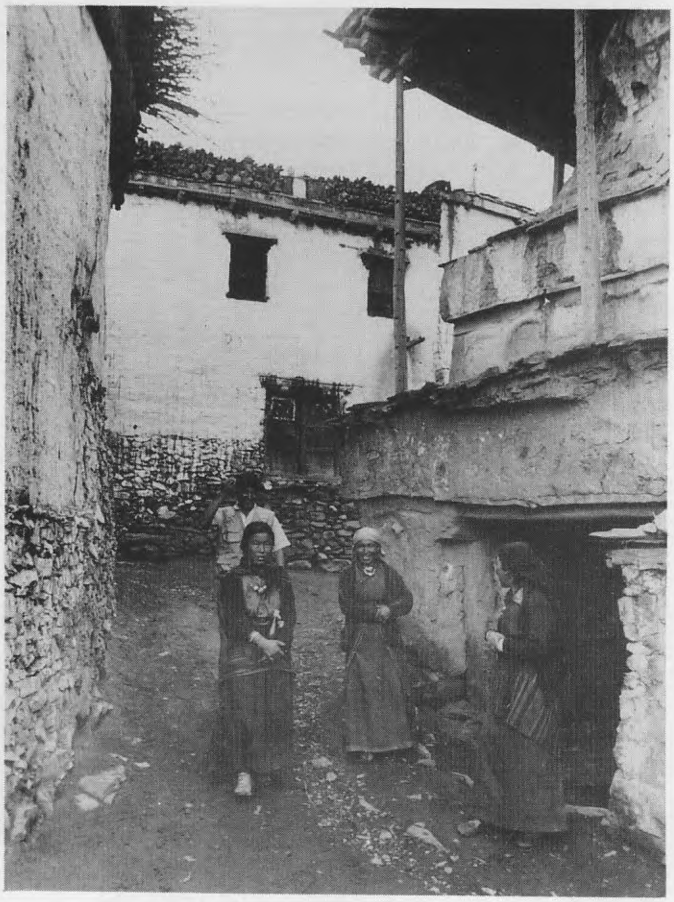


Fig. 3 First floor plan



Roof plan

Fig. 4 House of Angyal Gurung



Jharkot gateway chörten and house of Angyal Gurung

Fig. 5

Resident *dzos*

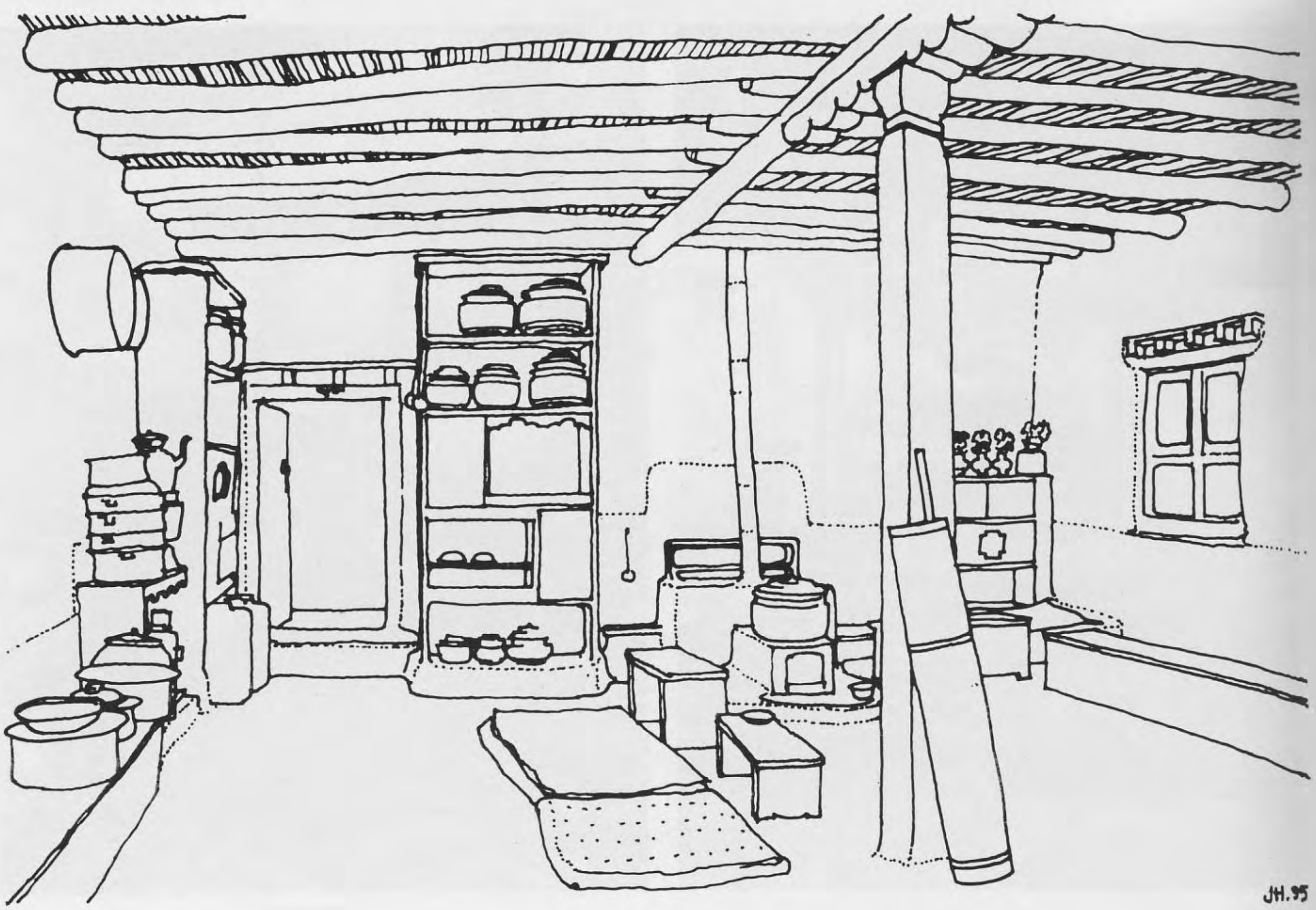


Fig. 6 Living room (*khangbache*) in Dankardzong house

Fig. 7 *Khangbache* (*khang-pa-che*) in Angyal Gurung house

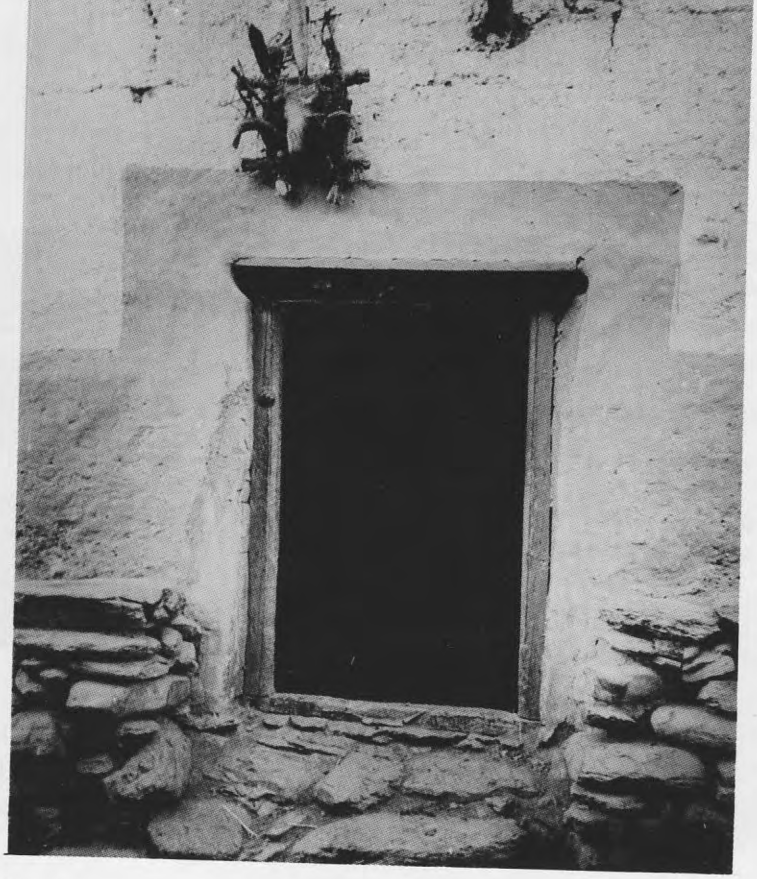


Fig. 8 Doorway with *namgo*, Kag

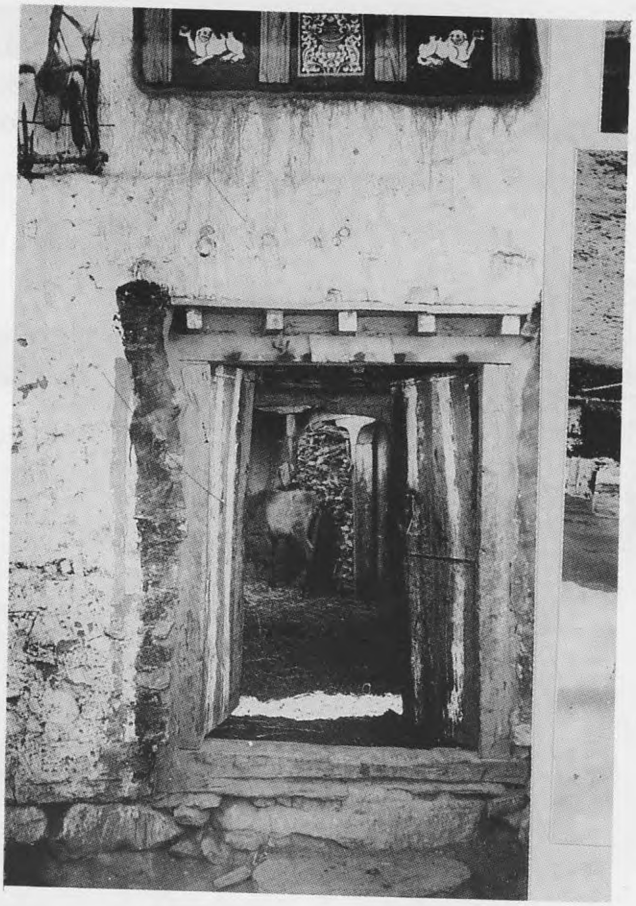
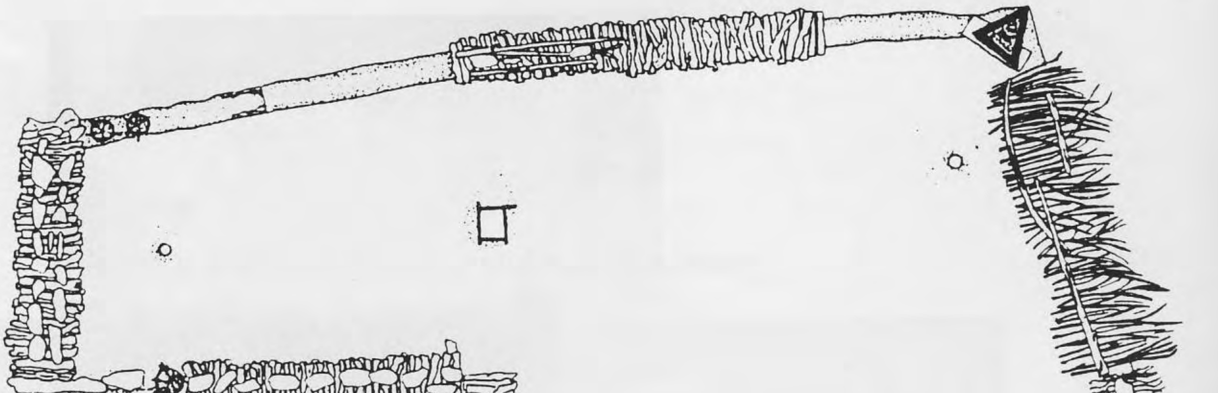


Fig. 9 Entrance with *namgo*, "sky-door" protective symbol, Phelak

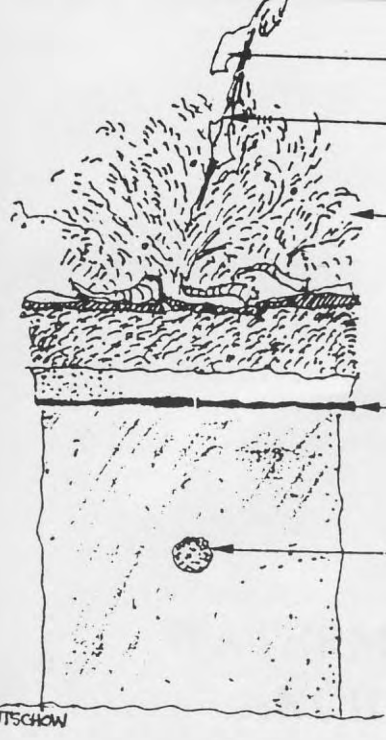
Fig. 10

Tsankhang (*btsan-khang*) shrine on roof of Waya Tsering house, Kag
This Triangular white *tsankhang* on the corner of the roof is dedicated to a Bon-po divinity. On the adjoining roof (left) is a square red shrine to a different divinity.

TSENKHANG
("house" of the demon)



Kagbeni:
Top view of the house of Waya Tsering on the southern edge of the village square, scale 1:100, drawing by Asha Ram Twayna, June 1993
The **Tsenkhang** is located in the northwestern corner and supported by a plank in order to point Northwest. Firewood and fruit line the parapet, the low wall extending some 20 to 30cm beyond the roof. The holes in the roof provide for ventilation, two small ones were added for recently introduced stove-pipes.



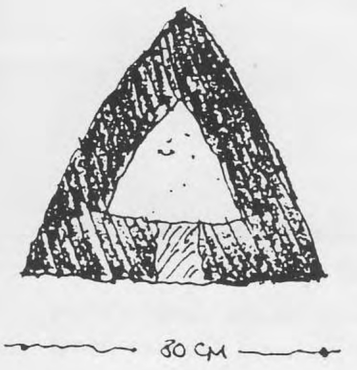
Fragments of prayer flags tied to the emerging *hrokshing*

hrokshing (*srog-shing*), lit. "life-tree", emerging from the centre of the structure

shuk-pa, twigs of juniper, an offering placed into the opening of the structure
ragyok, horns of bluesheep (*na*), placed onto the rim of the structure as offerings
cham, board covering the rim of the structure (in other cases flagstones)
layer of brushwood (*drolo*) and earth (*bekor*), imitating the the water repellent parapet above the eaves of a house
uppermost layer covered whith white clay (*tsag karo*)
cham, board marking the edge between the lower 'walls' and the 'crown'

main body of the 'house' (*khang*), coloured with red clay

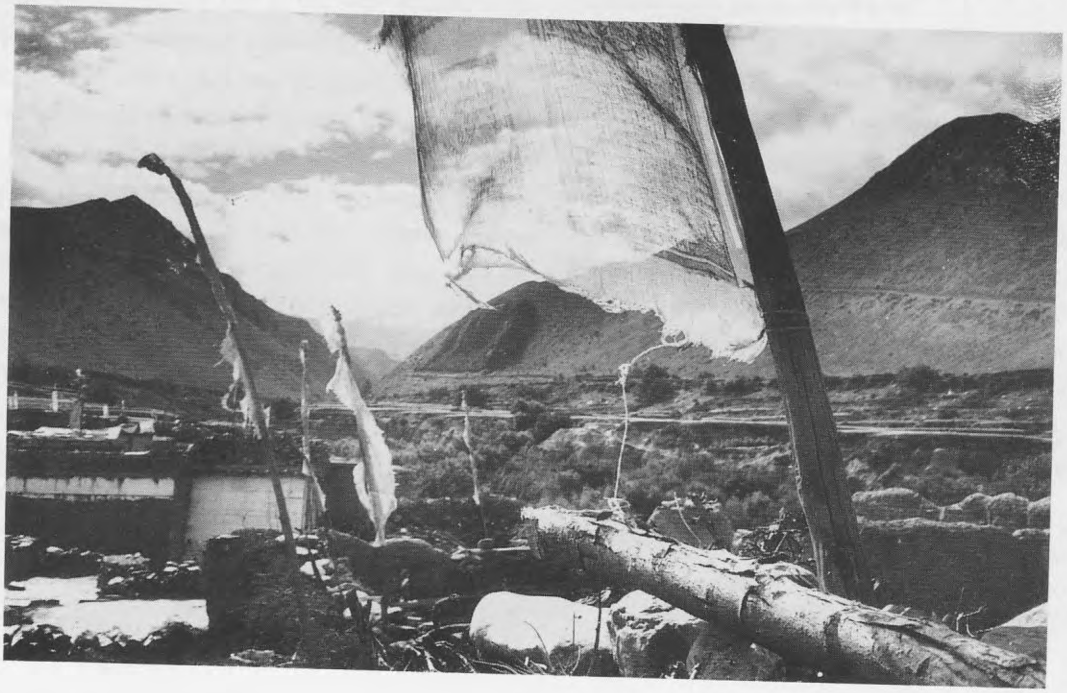
small hole, to be opened on the occasion of the yearly ritual of renewal: figures of sheep, goat and yak, moulded in *tsampa*, are inserted to reinforce good fortune



Tsen Khang
example from the southwestern corner of the house of Pema Drolkar, dedicated to Abse, the Bonpo protector

Fig. 11

Fig. 12 Prayer flags on roof in Kag



WATERMILLS IN MUSTANG: NOTES ON ARCHITECTURE, FUNCTION AND MANAGEMENT[1]

—John Harrison and Charles Ramble

In a land which traditionally has possessed only the simplest technology—the loom, the door lock, the potter's wheel, and no wheeled vehicle—the horizontal watermill is the only machine which reaches beyond the power of human and animal muscle to harness the force of nature. It is still a very simple machine—in Europe the small horizontal watermill was superceded by more powerful geared vertical water-wheels as long ago as the early Middle Ages—but a very appropriate technology and an essential part of agricultural life and economy in Mustang.

Watermills are usually powered by irrigation canals or by channels diverted from rivers. In the Tibetan dialect of Baragaon, such mills are known as *churag* (Tib. *chu-rags*), a term that literally means "dam" or "dyke".[2] Less commonly, they may be operated by the outflow of a reservoir, as is the case in Taye (Nep. Tangbe), where a long series of mills is disposed along the channel between the reservoir and the first distributaries. Although they are no different in terms of their construction, such mills are called *dzingrag* (Tib. *rdzing-rags*), "reservoir mills".

The mills in Mustang conform to the general pattern observed throughout the Himalaya, Karakoram and Hindu Kush. Over this vast area there is a remarkable consistency in the machinery and mode of operation; only the building envelope changes to reflect the construction techniques and available materials of a particular region.

The motive power, water, is conducted along a man-made channel, also called *churag* or *yura* (Tib. *yur-ba*), "canal", which may run for some considerable distance away from its source in the river. The channel is built up across sloping ground until a height of at least two metres is gained and the water can be directed down a chute into the mill. The direction of the water is controlled by small wooden sluice gates, *ka* (Tib. *rka*), so that the mill can be by-passed when not in use. (For illustrations of the component parts of a mill, see fig. 3.)

The chute, *a* (Tib. *wa*), is formed from a single

hollowed pine log, three to four metres in length, laid at an angle of 30-40º on the raised masonry end of the water channel to direct a jet of water onto the blades of the wheel. The blades, *shokpa* (Tib. *shog-pa*, literally "wings"), are shaped from flat boards, between ten and twenty in number, and slotted and wedged at an angle of 20º from the vertical into a heavy wooden hub, *bumpa* (Tib. *bum-pa*). A small iron, or formerly stone, pin, *bumchang* (Tib. *bum-'chang*), is set into the bottom of the *bumpa*, and revolves in a stone socket, *mamone*, set firmly in the bed of the wheel chamber. The southernmost mills seen in Mustang, in Thini and Jomsom, were fitted with a tentering rod and beams on which the wheel revolved: this device enables the beam to be raised or lowered slightly from within the millhouse to adjust the fineness of the grinding. The tentering rod was not seen in any mill north of Jomsom. Without the tentering rod any adjustment to the stones has to be made from below—so it will not be done very often.

Mills—hand and water—turn anticlockwise in Buddhist communities and clockwise in Bonpo ones, since a non-sacred object turning in the direction of a prayer wheel would be sacrilegious.

Into a socket in the top of the *bumpa* is fitted the vertical spindle (also *bumchang*), held in place with wedges, *ser* (Tib. *gzer*). The top of the wooden spindle, *kolem*, passes through the hole in the centre of the lower millstone, *magap* (Tib. *ma-gab*), and terminates in the iron *kya* (Tib. *skya*) and *te* (< Tib. *rtod[-pa]*?) which fit into a slot in the bottom of the upper millstone, *yakap* (Tib. *ya-gab*). There is no gearing in the horizontal watermill, simply a direct drive shaft from the wheel to the upper millstone, which revolves above the stationary lower stone. Grain is fed into the hole in the centre of the upper stone and is ground between the two stones, gradually working its way to the outer edge along the grooves cut between the flat sections, *kha* (Tib. *kha*), in the upper surface of the lower stone. The stones are not very large, 60 to 70 cm in diameter, with a raised rim around the central "eye" of the upper stone. The ground flour falls into the wooden box surrounding the stone. The grain is fed into the millstones from a hopper suspended by straps or string from the roof. The hopper, *ding* (< Tib. *ting* or *gting*?), is now usually a four-sided tapering container of wood or metal (ghee tins), but in the Thini mill illustrated (figs. 1, 8) it is circular with a curved profile. This tin hopper is the exact shape of the hoppers in the Hindu Kush which are carved from a single large tree-trunk section; perhaps a memory of the time when the local forests were more extensive and less precious. The shoe is suspended below the hopper at a slight angle which can be adjusted to control the flow of grain. Attached to the shoe is the damsel, *ragyok* (Tib. *rwa-skyogs*), a sheep or goat horn which shakes the grain from the shoe as is vibrated by the turning stone.

Before it is loaded into the hopper, the grains may be sifted on a flat circular basket tray inside the millhouse. There will also be a wood-framed sieve, *tshaktsa* (< Tib. *'tshag-pa*, "to sieve"), and a soft sheepskin brush, *phebyak* (Tib. *phye-yag*?), for brushing the flour together from around the millstones.

Some mills in Tsarang had no hopper at all: the grain was simply fed into the stones by hand. As only a few mills were inspected in Lo I am unable to say if this is the general pattern, of a gradual simplification of the machinery the further north one goes up the Kali Gandaki, as the secondary mechanisms of tentering rod and hopper feed are

stripped away, leaving only the essential wheel, spindle and stones.

Although most grinding of grain is done at the watermill, a household may also have a hand-quern, *lekhor* (Tib. *lag-'khor*), for daily use or for small quantities. However, the tsampa produced is very coarse, and so the quern is generally only used for breaking up rape-seed before it is pressed to extract the oil.

The millhouse, *churag khangba* (Tib. *chu-rags khang-pa*),[3] is a simple rectangular building, large enough to accommodate the millstones and surrounding flour box at one end, with a space for the operator to sit and sift flour and grain inside the door. There may be a roof vent to light the interior, but not usually a window. The machinery area, sitting above the wheel chamber and watercourse on timber joists, has a higher floor level than the entrance area which is built on solid ground. The wheel chamber, just high enough at 80 cm - 1 metre to fit the wheel and its *bumpa*, is raised in dry stone wall construction, using substantial river boulders if the mill is near the river bed.

The roof has one or two main beams, poplar pole joists and a ceiling of small round poles topped with twigs, mud and flat edging stones.

The horizontal watermill is not a very efficient piece of machinery in terms of energy conversion: the water power is limited by the available length of the tree trunk chute and by the feasible height of the water channel; the angle of the chute (more powerful as it approaches the vertical) and the possible angle of the wheel blades, which should be perpendicular to the water jet; the lack of gearing; the inefficiency of stone bearings and roughly-hewn wooden moving parts. Nevertheless, it serves its purpose admirably in a rural community possessing few technological skills. It can be maintained and repaired, or even replaced, by the community, using local materials, and the speed or slowness of its operation is not a critical factor.

Management of watermills

All the villages of southern Mustang grow two crops a year: barley (which is supplemented by wheat in a few settlements and replaced by it entirely in Lubra), followed by sweet buckwheat. These constitute the staple food-crops of the region. Other crops, such as bitter buckwheat and a variety of other vegetables are also grown in smaller quantities. Of the latter, only bitter buckwheat is milled.

Barley is never ground raw (although it is said that it used to be before the wider availability of wheat); it is used only for *tsampa*, and is therefore parched in hot sand before being milled. Wheat and buckwheat are simply dried before being ground, since it is the raw flour that is used in a number of food preparations (principally flat bread).

Dogfood—made from reconstituted lees, the dried husks of barley or wheat after it has been fermented, and the beer pressed out of it—is also ground in watermills. It is not liked by mill owners as it is not a very substantial grist, and the resulting friction between the millstones tends to damage them.

Most frequently, watermills are the common property of a village. Some, however, are privately owned or belong to an institution such as a monastery, and the regulations surrounding their use differ slightly in consequence. The management of mills varies from place to place. Particular attention will be given here to Kag, since this village contains examples of all three types of ownership mentioned above.

There are four watermills in Kag, arranged in a

series over several hundred yards along an irrigation canal. The canal in question, called Shung (gZhung, "middle"), passes through the centre of the village, on a course roughly parallel to and north of the Dzong Chu (see fig. 9). Traditionally the maintenance of this canal—one of three in Kag—was carried out by women, and it is accordingly also known as Mo-yur, the Female Irrigation Canal. The reason for this is its convenient proximity to the hearths which the women would be tending. Since milling is carried out primarily by women, the central situation of the mills is also appropriate.

While the four mills are particularly accessible for the people of Kag themselves, they are also used by villagers from further afield: the inhabitants of Tshug (Nep. Chusang) and Gyaga—between three and four hours' walk to the north—also bring their grain to Kag to be milled. Tshug has no watermill of its own. The nearest settlement to Tshug, Te (Nep. Tetang), has two mills of its own in the floor of the Narshing Khola, but access is forbidden to outsiders (for reasons mentioned below). However, the single mill of nearby Tshognam, which straddles the territory of Te and Tshug, is also sometimes used by the inhabitants of the latter.

The ownership of the four Kag mills, in descending order, is as follows:

1. The village (*lungba*; Tib. *lung-ba*)
2. Pema Drolkar (private ownership)
3. The village
4. The monastic community (*chos-sde*)

All villagers are in principle free to use whichever mill they choose, but users are required to pay a fee to the owner, in the form of a proportion of the flour or *tsampa* that has been milled in the course of a session. The requisite quantity varies from place to place, but usually comprises one-fifteenth of the flour. In some places, however—Kag is one example—the fee is not fixed and the user gives whatever she or he considers reasonable. The convention in fact works in favour of the owner, since users tend to give more, rather than less, than the more usual figure for fear that they should be seen as mean. This is especially the case when a user has milled only a small quantity of grain, and a strict one-fifteenth payment would look miserably parsimonious.

In the case of the private watermill the fee is paid directly to the owner herself. The management of the two community-owned mills is more complex. In Kag, the fees that are incurred are not as in some other communities, paid directly to the village fund. Instead the right to collect the user fees is auctioned every year at a meeting. The highest bidder pays the agreed sum to the village and, for a period of one year thereafter, is entitled to collect all fees. At present, the winning bids are around Rs. 5000 to Rs. 6000, but the pecuniary equivalent of the flour collected is likely to amount to over Rs. 10000. One of the mills in Dzong is run along similar lines: management rights are auctioned for Rs. 2-3000, and the revenue amounts to around Rs. 10000 (Rebecca Saul and Tim Calder, personal communication). The lower of the two village mills has recently been renovated and upgraded by CARE, a non-government organisation that has established a number of development projects in Mustang. Since wastage at this mill is less (at least one-tenth of flour is lost through the inherent inefficiency of the technology), it is more popular than the other and the prices bid are therefore higher.

The management of the monastery mill is similar to that of the two village mills, to the extent that the fees collected do not go directly to the monastic

community but to an individual agent. The agent in this case is the steward (Tib. *dkon-gnyer*), an office that is held by each of the monks in turn on the basis of annual rotation. During his incumbency the steward is entitled to keep all the fees contributed by users of the mills. However, as part of his duties he is also required to provide all the oil required for fuelling the votive lamps (*mchod-me*) that are lit in the monastery every evening. The oil used is a type of Indian margarine, locally called *shing-mar* (lit. "wood butter") that costs around Rs. 1000 for a large tin. The annual requirement of this oil is about six such tins, and the profit margin is therefore similar to that on the village mills. The monastery mill probably attracts a larger number of users than the other two, because of a belief that, by donating their fees to the monastic community, the millers are also earning a certain amount of merit.

In a number of villages in Mustang it is the case that fees collected at watermills provide the payment of public servants. This is true, for example, in Dzong. In Dzong there are four watermills, three of which are powered by the water of the Dzong Chu and one by the main irrigation canal. The village officials include six constables (*rol-po*) who are selected by lottery and serve for a period of one year. Local officials do not aways receive remuneration for their services: until 1992 in Te, for example, it was customary for headmen to be *fined* a sum of money at the end of their term of office. Elsewhere (as in Kag) the constables and headmen receive a fixed stipend in cash, while in other villages (such as Tshug) they are entitled to keep a percentage of all fines that are levied within the community. In Dzong, however, the constables receive a percentage of the flour produced at the two mills. The system operates as follows. The constables are paired, and the three pairs collect the user fees according to a three-day roster. The quantity in question is one-fifteenth of the amount of flour milled on a given day. One of the mills is more efficient than the other and attracts a larger clientele: villages which have no mill of their own (Putra and, until recently, Chongkhor) also come to Dzong to grind their grain. In this case, however, the flour is not shared equally between the two constables who are the beneficiaries. Instead the two constables themselves alternate, every third day, with respect to the mill from which they will claim a fee. Let us say, for example, that the turn of constables A and B falls on a Saturday. Constable A will collect the fee from the users of the superior mill, and B will receive a percentage of whatever is produced at the other. The following Tuesday, when the turn of constables A and B comes around again, it is B who will be attached to the more profitable site, while A will take his chances at the poorer mill. There is, in fact, a tendency for millers to time their use of a mill so as to benefit a constable who happens to be a friend.

A similar system to that of Dzong operates in Thini. A document in Tibetan, dated 1934 and dealing with the regulations of the community, contains the following clause: "The income of buckwheat at the upper watermill shall be the headman's; that of the three other mills shall be for the constables". Since there were at this time six constables in Thini and only one headman, it is apparent that the flour stipend of the latter was double that of his assistants.

Traditionally, it was not only these monastic and secular officials whose remuneration was linked to watermills. A document from Te, probably dating from around the early eighteenth century contains

the following passage:

> After Buchen Thorang left [Te] for the religious life, our nobles masters [the rulers in the Muktinath Valley] told us to bring him back. He has returned here after becoming a wandering bard. While awaiting [the appropriate] permission from you nobles, he has not shared any utensils with us Tepas. We made Yungdrung Norzab beg for his flour beside the watermill, and hesitated to associate with him. This is an instance of how we honour you.

Wandering bards (Tib. *ma-ni-pa*) are, even today, regarded as being of low social status. Although it is not explicitly stated, the Yungdrung Norzab named in this extract is presumably also a bard like Buchen Thorang. For mendicants of this sort whose lowly rank forbade them entry to households, the watermill represented a place where they could hope to benefit from the generosity of villagers.

In Dzar (Nep. Jharkot) there are six watermills (one fell into disuse in 1993) at the bottom of the river gorge below the village. They are all situated along one water channel close to the river, and this channel appeared to be solely for the mills, without any irrigation function. One of the mills is owned by the monks of the village gompa, one by nuns, and four are collectively owned by the villages. Users pay in flour for the use of the mill, but there is no fixed amount.

Mill owners in Chongkhor traditionally received payments from the village in excess of the standard user fees. As in Kag (Nep. Kagbeni), the latter were not fixed but consisted of whatever the millers deemed appropriate. (The three Chongkhor mills fell into disuse over twenty years ago, and until the recent construction of several watermills by the aid organisation CARE Nepal the villagers used to grind their grain in neighbouring Dzong.) For the merit-making funeral feasts called *gewa* (Tib. *dge-ba*), every individual in the village receives a ball of boiled rice or buckwheat stodge and one rupee from the bereaved family. On these occasions the mill-owners were particularly honoured. Of the three mills in the village one belonged to a single individual, one to two joint owners and one was owned by three shareholders. In the latter case, one person owned a half and two others a quarter each. The fees for each of the mills were divided according to the proportion that each held. On the occasion of *dge-ba* ceremonies the owners of each mill would receive one ball of food and one rupee above their quota as inhabitants of Chongkhor. Thus of the three shareholders of the third mill, one would receive half a foodball and 50 paise, and the two others would each a quarter of a ball and 25 paise. Although the mills have been out of use for over two decades, the owning families continue to be so honoured.

In Te there is a household roster for use of the mills. Each of the mills is used by two of the four sectors into which the community is divided, and any changes within the two circuits may be made only by arrangement between the households concerned.

In a Tibetan Buddhist society where the power of the winds is employed to spin prayer wheels, and where prayer flags fly from every house, it is not surprising to find the mechanism of the horizontal watermill also adapted to turn prayer wheels,

chukhor (*chu-'khor*, lit. "water wheel"). Since the purpose of these devices is religious, and without any direct material benefit, the wheels turn in the opposite direction to the rotation of mills (viz. clockwise and anticlockwise for Buddhist and Bonpo communities respectively). Several examples were seen, in Geling, Muktinath, and across the Thorong La in Nyeshang, with a chute and wheel half the size of a mill, housed in a small stone structure surmounted by a chörten. *Chukhor* are also quite common in neighbouring Dolpo. A particularly good example is to be found in the religious community of Shey, which, although it has no flour-mill, boasts a cluster of half-a-dozen water-driven prayer-wheels.

Notes

[1] The authors are grateful to Rebecca Saul and Tim Calder for their valuable remarks on an earlier version of this article.

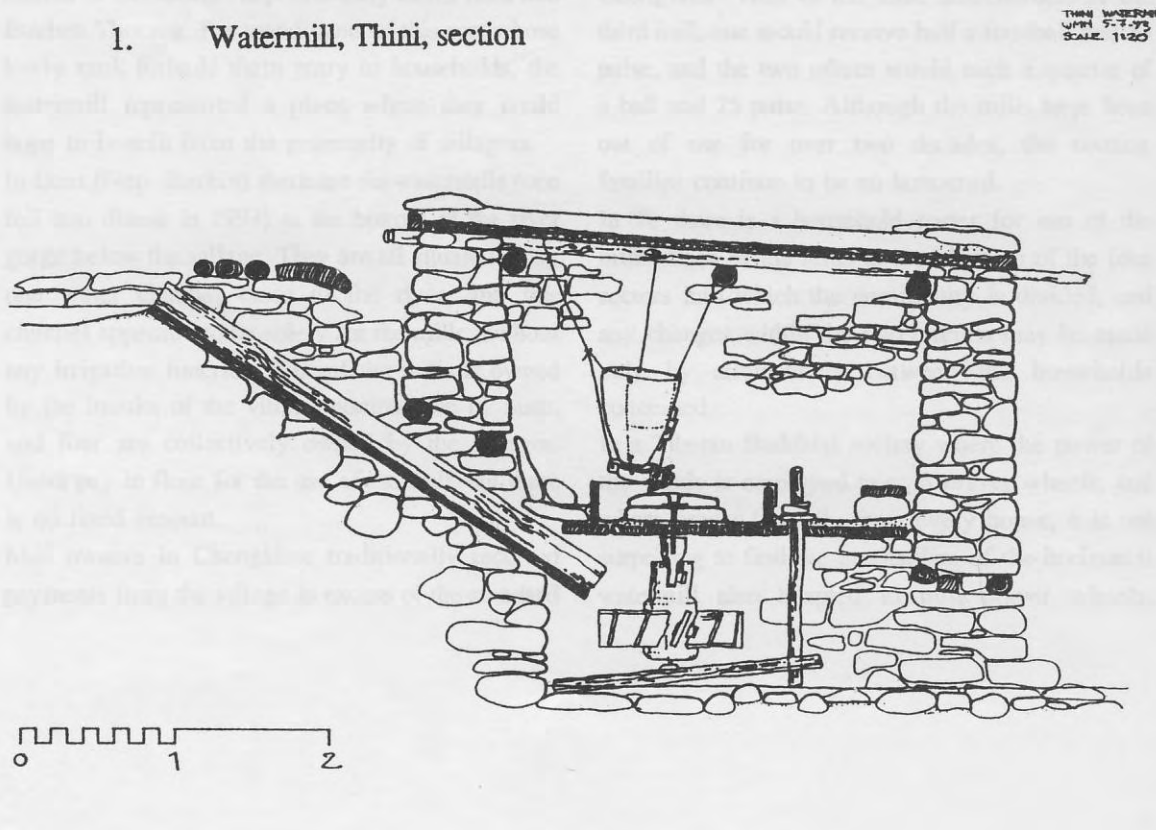
[2] The usual Central Tibetan word, *chu-'thag*, is not used in Mustang (*chu*: water; *'thag-pa*: to grind).

[3] *Churag* is also used as a derogatory term for a small dwelling house.

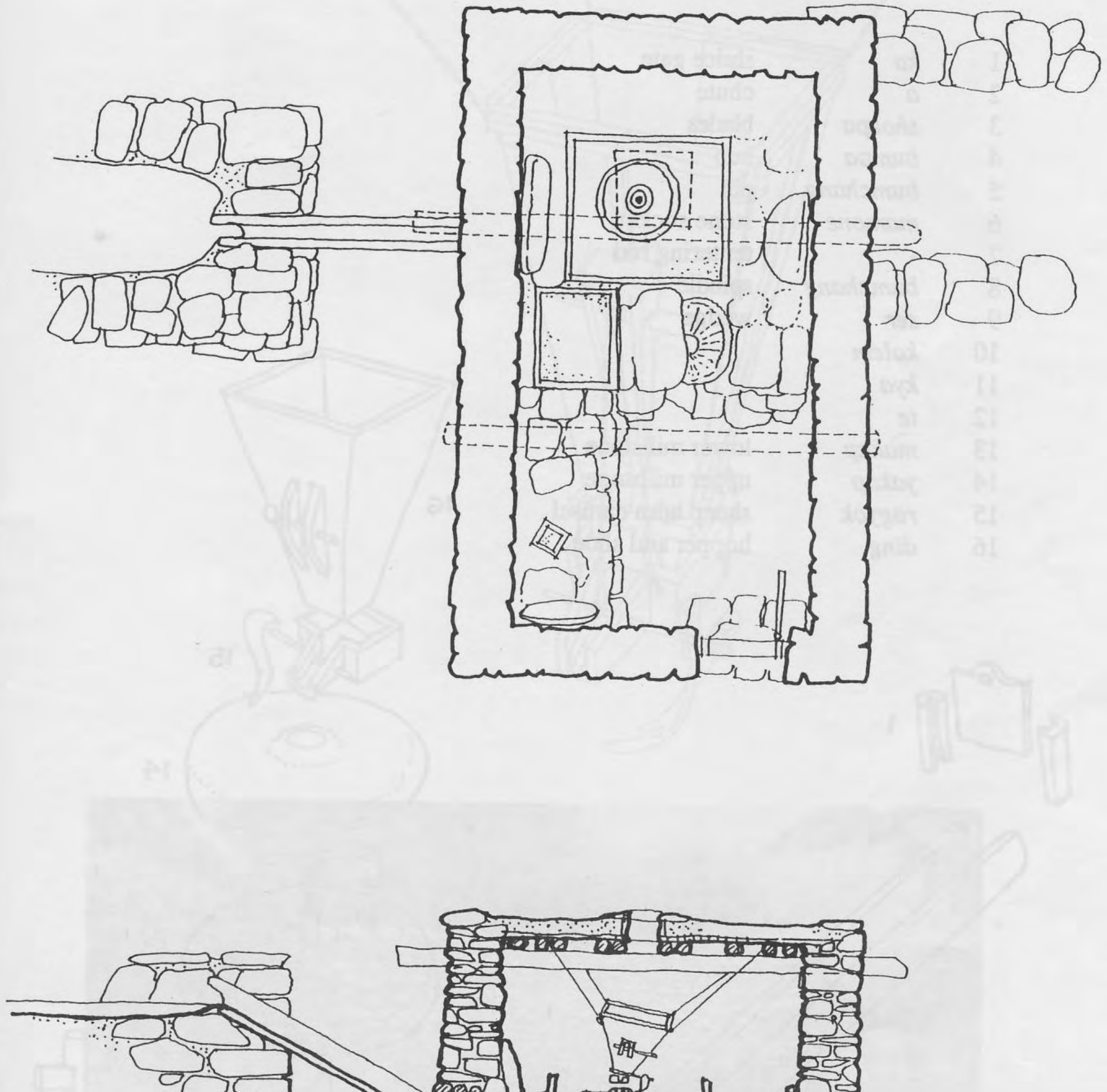
List of Illustrations

1. Watermill, Thini, section
2. Village watermill, Kagbeni, plan and section
3. Watermill machinery parts
4. Grain hopper
5. Kagbeni watermill
6. Thini watermill, water channel and sluice gate
7. Thini watermill, showing chute, wheel and tentering rod
8. Thini watermill interior
9. Plan of Kagbeni village centre
10. Water-powered prayer wheel

1. Watermill, Thini, section



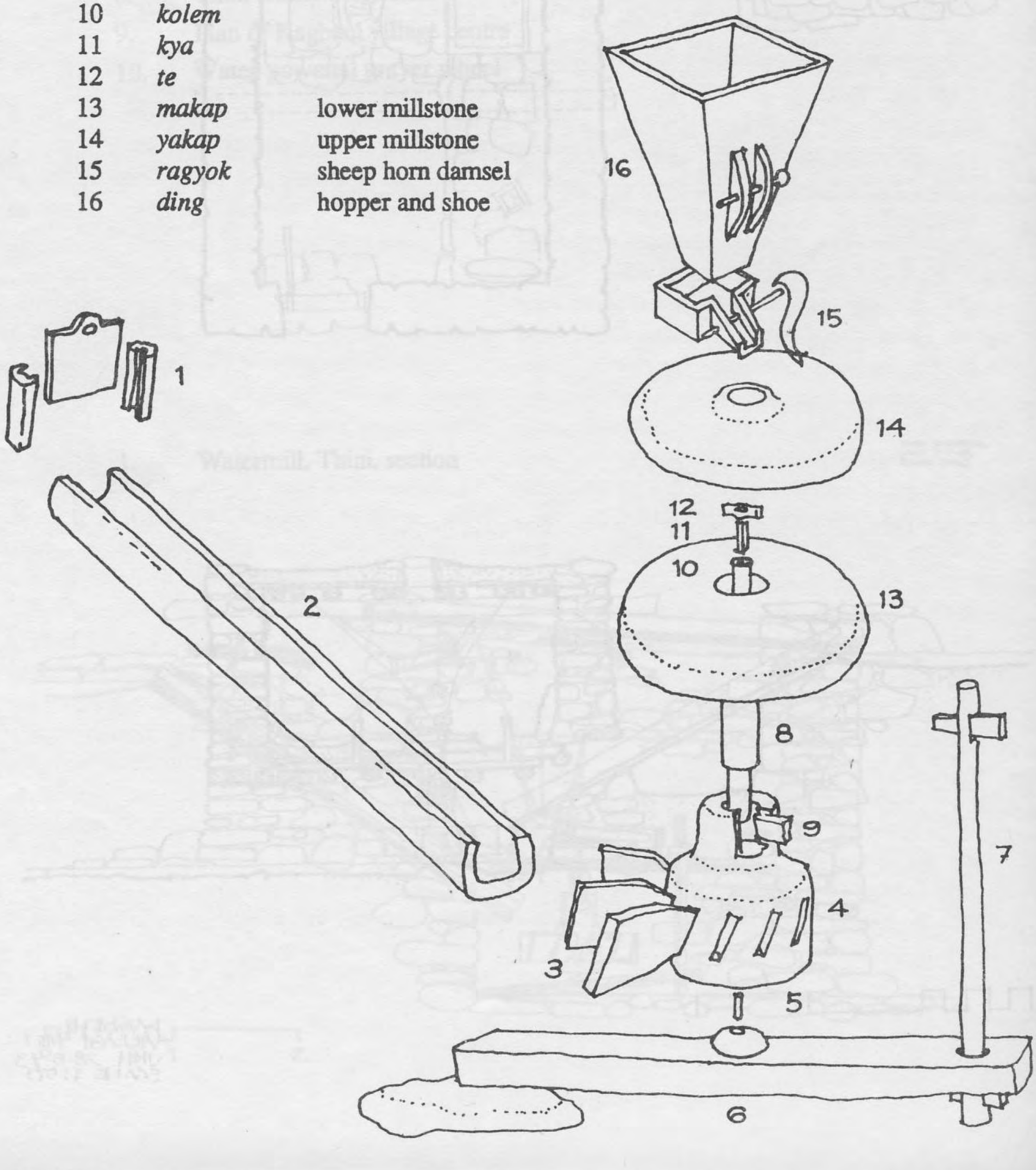
2. Village watermill, Kagbeni, plan and section



3. Watermill machinery parts

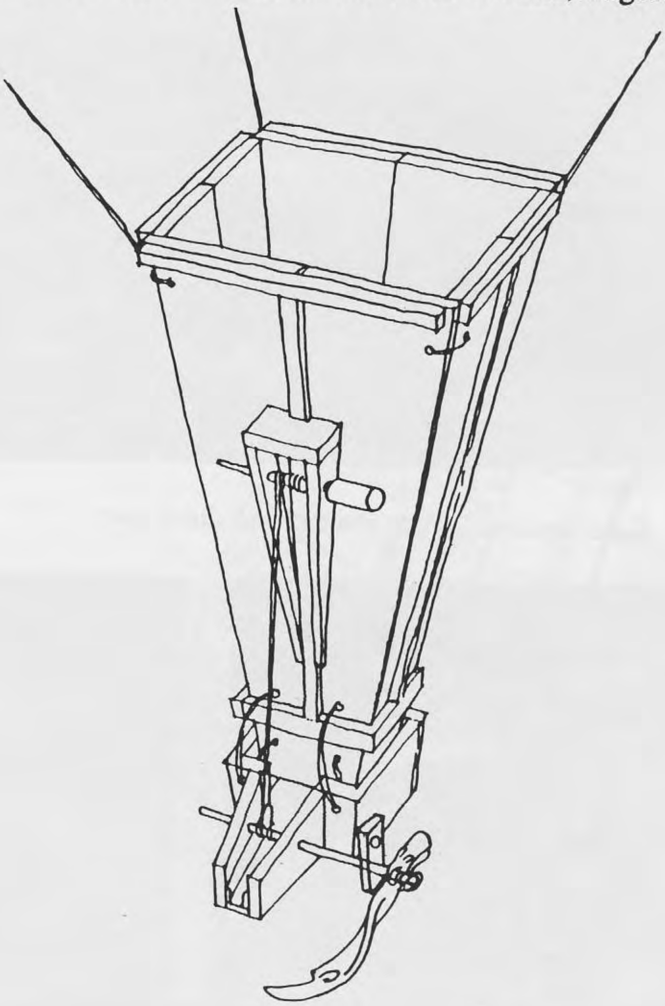
Parts of the watermill (*churag khangba*) as named in Kagbeni

1	*ka*	sluice gate
2	*a*	chute
3	*shokpa*	blades
4	*bumpa*	hub
5	*bumchang*	pin
6	*mamone*	stone socket
7	-	tentering rod
8	*bumchang*	spindle
9	*ser*	wedge
10	*kolem*	
11	*kya*	
12	*te*	
13	*makap*	lower millstone
14	*yakap*	upper millstone
15	*ragyok*	sheep horn damsel
16	*ding*	hopper and shoe



4. Grain hopper

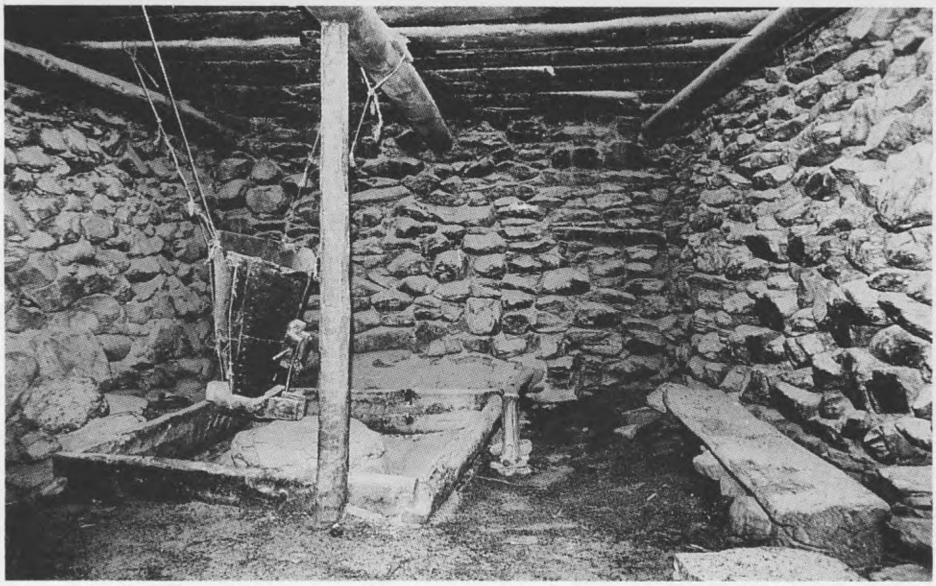
Wooden hopper in watermill of Pema Drolkar, Kagbeni



5. Kagbeni watermill

6. Thini watermill, water channel and sluice gate

7. Thini watermill, showing chute, wheel and tentering rod



8. Thini watermill interior

9. Plan of Kagbeni village centre

Plan of Kagbeni showing location of watermills

KAC · SITE PLAN · OCTOBER 1991

BIJAY BASUKALA · NIELS GUTSCHOW · ROBERT KOSTKA

10. Water-powered prayer wheel

Ritual deposits at Garab-Dzong, Dist. Mustang

—Angela von den Driesch, Henriette Manhart, Petra Maurer and Ernst Pohl

In 1996 the third excavation campaign of the Garab-Dzong project took place in South Mustang. During this campaign we were able to conclude our work at the fortified settlement itself. Beside this, we started with archaeological research in the immediate area around Garab-Dzong. The question about the chronology and formation of political centres related with the settlement of Garab-Dzong also requires investigation in the environment of the centre. Which effect have changes in settlement at Garab-Dzong on the settlement structure of the vicinity? How was the structure of settlement of this micro region prior to the establishment of a fortified complex with central functions? In order to answer these questions, since this year several abandoned settlements near Garab-Dzong have been included in the investigations. We opened trenches in the settlements of Dzokhang, Piangdang and Bumchekhang to check the chronological position of each site. All these settlements are situated just a few hundred meters apart from Garab-Dzong and therefore of great interest for our research.

During all excavation campaigns, different kinds of deposits were uncovered at Garab-Dzong. Within the settlement of Garab-Dzong only two human burials were found, in contrast to the excavation at Khyinga, where burials occurred frequently.[1] Remains of a new-born baby's skeleton have been recovered from trench B III/XIII. There is no evidence of its connection to any construction activity since the bones have been found amidst a layer of filling in a very small and flat mark of dark soil. A second feature from trench B XLII/LII has to be classified in connection with building activity. Here, the skeleton of a child was found in a burial pit dug into the natural soil. Probably in the same way as in Khyinga, it was an extremely flexed burial[2] covered by a bulbous vessel. The clay floor of house 6/2 is covering the entire complex.

Deposits of selected parts of animal remains are numerous. Concluding from the location and the manner of their deposition, as well as from features on the animal remains themselves, the ritual character of these deposits is evident. Though

depths are varying, each of it had a diameter of about 10—20 cm. They were all situated right in front of the buildings' entrances and contained parts of animal skeletons, as well as - in two cases - textile remains.[3]

The significance of these features became evident already in course of the first campaign 1994. In trench B II/XII several animal skulls were recovered. However, since no particular features could be observed in connection with these, it is assumed, that they were no longer in situ.

A different situation was encountered when excavating the area in front of the entrance to house 2 (fig. 1). Here we recorded a distinct stratigraphic sequence at the borderline between B I/XI and B II/XII. When we excavated this area, the strata above the clay floor F1 were cleared away and the surface of the floor was cleaned. Besides two burned areas, several circular dark soil marks were encountered; they had partly been covered with flat stones (fig. 2). After the documentation of the planum each feature was recorded and is listed in the following:[4]

F 52 (B I, 1/2):

Archaeological evidence (= A.e.): Circular soil mark of 20 cm diameter without stone covering. The pit had a depth of 15 cm. In the refill animal remains and ceramics.

Zoological evidence (= Z.e.): Three horn sheaths of big bovids.

F 53 (B I, 1/2):

A.e.: Circular soil mark of 20 cm diameter without stone covering. The pit had a depth of 14 cm. In the refill animal bones and ceramics.

Z.e.: Several unidentifiable bone fragments which apparently had no ritual significance.

F 54 (B I, 1-2/2):

A.e.: Circular soil mark of 30 cm diameter without stone covering. The pit had a depth of 21 cm. In the refill animal bones.

Z.e.: 1. Two horn sheaths of a big bovid. 2. The disintegrated cranium of a young dog. The age of the animal was approximately six months as can be seen from the mature teeth which had begun to erupt shortly before death. All sutures of the skull are still open. Cut marks on the occipital bone indicate that the head was cut off from the animal's body. 3. Skull (the cranium with both mandibles) of a small sized adult domestic cat.

F 55 (B I, 2-12/2):

A.e.: Circular soil mark of 22 cm diameter without stone covering. At the western side of the pit a stone was inserted on edge. The pit had a depth of 8 cm. In the refill a piece of textile.

F 56 (B I, 11/2):

A.e.: Circular soil mark of 24 cm diameter without stone covering. The pit had a depth of 10 cm. In the refill animal bones.

Z.e.: The heavily damaged cranium, atlas and axis of a dog. The animal was young adult and medium sized. The teeth show no wear.

F 57 (B I, 11/2):

A.e.: Circular soil mark of 18 cm diameter with stone covering. The pit had a depth of only a few cm. In the refill animal bones.

Z.e.: The heavily damaged cranium of a relatively large dog (size of a shepherd dog) of considerable age. The skull is medium slenderly built. Atlas and axis *(Dens epistrophei)* are present. Thus the head

of the animal was cut off in between these first two cervical vertebras.

F 58 (B I, 11/2):

A.e.: Circular soil mark of 20 cm diameter with stone covering. The pit had a depth of 16 cm. In the refill animal bones.

Z.e.: 1. Horn sheath of a big bovid. 2. The left lower jawbone of an adult, medium sized to large dog (size of a shepherd dog). No cut marks.

F 59 (B I, 11/2):

A.e.: Circular soil mark of 16 cm diameter without stone covering. The flat pit had a depth of only a few cm. In the refill animal bones.

Z.e.: Several unidentifiable bone fragments. Obviously no ritual context.

F 60 (B I, 11/1-12/2):

A.e.: Circular soil mark of 20 cm diameter without stone covering. The flat pit had a depth of only a few cm. In the refill animal bones.

Z.e.: The upper canine tooth of a young adult dog.

F 61 (B I, 21/2):

A.e.: Circular soil mark of 14 cm diameter with stone covering. The pit had a depth of 12 cm. No finds.

F 62 (B I, 21/2):

A.e.: Eight-shaped soil mark of 28 cm length and 20 cm width with stone covering. Probably two pits. The northern appears flat, the southern cylindrical in the section with a depth of 19 cm. In the refill animal bones.

Z.e.: The cranium of a juvenile, small sized domestic cat. The milk teeth were about to be replaced by the permanent teeth; thus the age of the animal was approximately 5 months.

F 63 (B I, 22/2):

A.e.: Circular soil mark of 20 cm diameter without stone covering. The pit had a depth of 16 cm. In the refill animal bones.

Z.e.: The disintegrated cranium and mandibles of a young adult, medium sized dog.

F 64 (B I, 21/2):

A.e.: Circular soil mark of 17 cm diameter with stone covering. The pit had a depth of 18 cm. In the refill animal bones.

Z.e.: The more or less complete skull of a small domestic cat. Its teeth were about to change, so an age of 4 to 5 months can be assumed.

After the documentation of these features and the recovering of the find material, the tamped clay floor (F 1) was cleared away within these quadrants and the filling layer below (F 9) was cleaned. Here, three additional soil marks appeared.

F 65 (B I, 22):

A.e.: Circular soil mark of about 18 cm diameter without stone covering. The pit had a depth of 10 cm. In the refill animal remains.

Z.e.: Horn sheath of a big bovid.

F 66 (B I, 21-22/3):

A.e.: Circular soil mark of 22 cm diameter without stone covering. The flat pit had a depth of only a few cm. In the refill animal bones were attached to a piece of textile.

Z.e.: The more or less complete skull of a medium sized and medium slenderly built dog. Cut marks on the occiput demonstrate, that the head was cut off. Beside this, the *foramen magnum* was enlarged

intentionally by means of an instrument. The age of the animal was about 6 years or older as can be deduced from the medium wear of the teeth.

F 67 (B I, 1-11/3):

A.e.: Circular soil mark of 18 cm diameter without stone covering. The flat pit had a depth of 10 cm. In the refill animal bones and ceramics.

Z.e.: The complete skull of an aged, medium to large sized and slenderly built dog with heavily worn teeth. The facial region is damaged. This skull also has cut marks on the occipital bone verifying decapitation and opening of the occipital foramen.

After these features have been studied and recognized as ritual deposits by A v.d. Driesch and H. Manhart and after a written source on ritual animal deposits was studied by P. Maurer, an additional trench was opened in front of the northern entrance to the central square in the 1995 season (trench B XII/XXII), in order to gain more well recorded features of this kind. The investigation of these deposits of animal remains and their relation to the entrances of houses enabled us to discover more deposits in other entrance areas of the central square.

F 90 (B XXII, 96/2):

A.e.: Circular soil mark of 15 cm diameter without stone covering. The flat pit had a depth of 10 cm. In the refill animal bones.

Z.e.: The damaged skull and the foot bones of a newly born goat kid.

F 91 (B XII, 6-7/2):

A.e.: Circular soil mark of 20 cm diameter, overlapped by F 92 in the West (fig 3), covered with two flat stones placed oblique upon the ground. The pit had a depth of 10 cm. In the refill animal bones.

Z.e.: The more or less complete skeleton of an unborn calf

F 92 (B XII, 6/2-3):

A.e.: Circular soil mark of 25 cm diameter with stone covering (fig. 3). The pit had a depth of 25 cm. In the refill animal bones.

Z.e.: The well preserved skull of a medium sized, relatively slender dog (fig. 4). The animal had lost most of its teeth due to its great age. This skull also exhibits cut marks on the occipital bone. Its foramen magnum is intentionally enlarged.

The arrangement of further characteristics of the animal bone material and its distribution within the excavated area show, that during the period of settlement at Garab-Dzong this custom of deposits was used more often than can be proved by the evident features. The distribution of selected animal skeletal parts also shows a characteristic accumulation of such occurrences in the area of entrances and approaches.

Analysing the distribution of these deposits, their relation to the central square on the upper plateau is striking. Similar features were not found within the rooms of the trenches B I/XI and B III/XIII or within the trenches A XI-A XIII and B XLII/LII. Therefore, the few animal bones recovered without special features east and west of the central place must not be regarded as disturbed ritual deposits; they appear to be ordinary debris inside the refill layers.

Further study of entrance areas within other settlements is required in order to show, whether this was a custom, carried out only as a public ceremony at a central square, or was practised by each family at their respective houses, as described

in the literary source introduced below. This type of deposits could neither be recorded in excavations in the Muktinath valley nor from the abandoned settlements of Dzokhang, Piangdang and Bumchekhang in the vicinity of Garab-Dzong.[5] Within these settlements no area in front of buildings like the central square at Garab-Dzong has been excavated so far. Therefore, we are not able to decide, whether this type of deposits belongs to a local ritual at Garab-Dzong only or whether it has comparisons in other regions of the High Himalayas.

Archaeozoological analysis of the ritual deposits

In these deposits, we are dealing with horn sheaths of big bovids and skulls of dogs and cats which have been laid down in little pits in front of several entrances at Garab-Dzong. The ritual deposits predominantly comprise skulls of dogs, either complete or of which only the crania were represented. In two instances skulls with the first and second cervical vertebrae were found. In one other case only the mandible of a dog and in another case only a single canine tooth were deposited. The skulls represent a considerable variation of dogs, with respect to size and proportion (fig.5). There are medium sized and rather elongated skulls, however the majority of the dogs possessed a broader and shorter, stumpy head. This type of dog can still be found in the region (fig.6). Skulls of very small dogs, nowadays rather often kept as pets in the households of Jomsom and further upstream the Kali Gandaki River (similar the 'Lhasa Apso' [6]), have not been ascertained.

Horn sheaths of big bovids (yaks or cattle-yak-hybrids) form another group in the sample. The sheaths of the horns, of which often only the ends are preserved, cannot be identified as horns of yaks or cattle-yak-hybrids. The hybrids of cattle and yak, locally named dzos or dzopas, are used quite often in the region as animals for transport or as draught animals. At present they are not bred in the Mustang district, but imported from elsewhere, since the population of yak is constantly decreasing and bulls of the zebu cattle used for the cross-breeding do not develop well in high altitude. The yak and its hybrids with cattle, the males of the latter being sterile, have long, protruding and pointed horns. In the case of the ritual deposits, we need not take cattle into consideration, because the dwarf cows living in this region develop only very short and small horns which have no pointed ends like the ones found at Garab-Dzong.

Only three specimens belong to cats. Within the assemblage of dog skulls, all age groups are represented. We could verify juvenile, young adult and very old individuals. In contrast, the cats were all comparably young. Assuming that the animals, whose skulls were used in the ritual, were not killed but died a natural death, then the statement could be made that dogs lived under better conditions, reaching a higher age than cats. This assumption is confirmed by observations of the present situation in the region. The enlargement of the occipital foramen of some of the skulls may have served to make it easier to put something into the braincase. Finally the specific customs in ancient Garab-Dzong included the ritual deposition of parts of young goats and unborn calves.

As additional specimens from refill layers have been identified: at least another 15 further dog skulls, three more cat skulls, one skull of a red fox *(Vulpes vulpes)* the left lower jawbone of a beach marten *(Martes foina)* the well preserved cranium of a snow leopard *(Uncia uncia)* (fig.7) and further horns of big bovids.

Ethnological analysis of the ritual depositories

mTshams pa ngag dbang (abbreviated as M), who owns a tourist lodge and practises traditional medicine, possesses a manuscript he inherited from his father, who lived in the village of Chongkor in the Muktinath valley (fig.8). It describes a ritual to fight or to control demons. M said that the text was written down by his father, but we were not able to determine whether the father was also the author or had just copied the text. The ritual is still practised in the Mustang district. A brief summary of the contents follows:

The performer of the ritual must draw a picture of the demon on a piece of cotton cloth from a graveyard or on a piece of bark (fig.9). The text describes precisely how the appearance of the demon has to be drawn. It has to have a man-like shape. The right hand beats the chest, the left hand pulls the hair of the head upwards, blood drips out of the mouth, the eyes look like the eyes of a dead person, and the arms and the legs are fettered with iron chains. An arrow, a bow, a spear and a knife surround the demon, and mantras are written on his belly and on the lower half of his limbs.

In order to combat the demon, the following steps have to be executed: first a vajra is pressed d into the picture of the demon, and then the picture is sprinkled with blood, then fumigated and bound by mantras. Thereafter, the picture is rolled up and put into the skull or the horn sheath of an animal. Before the demon, now captured in the skull or in the horn, is buried, which is commonly done outside the door of a house or at a cross-roads, a ritual for the earth must be performed.

The text mentions different kinds of demons: dGra sri is the demon of the enemy; Chung sri is the name of the demon who kills little children; God sri is the demon of misfortune who is supposed to cause harm to live stock and Dur sri is the demon of cemeteries. To each kind of demon, a particular kind of skull or horn is attributed: For dGra sri, the left horn of a breeding bull, and if not available, that of a not castrated yak is necessary. Chung sri requires the skull of a female mule, God sri the right horn or the skull of a yak. For Spyi sri, a demon who causes misfortune in general, the skull of a sterile animal should be buried. As a substitute, the skull of a goat, a pig or a dog can be taken. The performer of the ritual must draw a double vajra on the forehead of the skull, a swastika on its back, and the skull is sealed with wax. According to M, all members of the family have to attend the ceremony, and all of them have to press the seal in order to make the ritual effective.

While there seem to be no exact parallels to the practice recorded in the Muktinath valley in the rest of Tibet, Tibetans are known to believe in the existence of demons and believe that they can be controlled by burying them in different kinds of skulls. R. de Nebesky-Wojkowitz reports Tibetan traditions which relate that all demons came from the country of the nine continents *(sri yul gling dgu)* and that they were all born in the castle of the Sri, in a castle composed of piled up skulls[7]. The class of demon called Sri was hatched from eggs; it had a human body and an animal head, the species of which do not correspond to the species of the buried skulls.

To summarise, the deposits of carnivores, mainly skulls of dogs and horn sheaths of yaks or dzos found within the round pits at two entrances of the central square on the plateau of Garab-Dzong do not yet have comparisons at other excavated sites in Southern Mustang. According to a newly dis-

covered text the ritual deposits served to avert demons, which are ghosts bringing all kinds of wrong and bad fortune as accidents, illness and death to man and animal. Numerous comparable features from the excavated areas illustrate that this custom apparently had few analogies in Tibetan literature, but was practised frequently during the entire period of occupation of Garab-Dzong. According to several informants from the surrounding villages, it is still sporadically carried out today.

In comparison with the written source the textile finds from two features (F 55 and F 66) do not appear strange; bits of cotton or bark were mentioned as writing- and drawing-sheet within the ritual. In course of the excavation we were able to recover a series of folded bark fragments from several walls and refill layers, yet they are not known from deposits. Further research has to show, whether there still are or at least have been similar customs in other valleys of the Himalayas.

Explanations of the figures:

Fig. 1. Garab-Dzong, Trench B I/XI: Entrance area of house 2. Scale 1:30.

Fig. 2. Garab-Dzong, Trench B I/XI: Ritual deposits in front of house 2.

Fig. 3. Garab-Dzong, Trench B XII/XXII: Deposits F 91 and F 92.

Fig. 4. Garab-Dzong, Trench B XII/XXII: F 92, skull of a dog.

Fig. 5. Garab-Dzong, type variation of dog skulls.

Fig. 6. Garab-Dzong, a recent type of dog.

Fig. 7. Garab-Dzong, skull of a snow leopard exhibiting cut marks and an intentionally enlarged foramen magnum.

Fig. 8. Garab-Dzong, part of the manuscript owned by *mTshams pa ngag dbang*, Jomsom.

Fig. 9. Garab-Dzong, picture of a demon which has to be buried in a dog skull.

Notes

[1] H.-G. Hüttel, Archäologische Siedlungsforschung im Hohen Himalaya. Die Ausgrabungen der KAVA im Muktinath-Tal/Nepal 1991-1992. Beiträge zur allgemeinen und vergleichenden Archäologie 14, 1994, 47-147 esp. 122ff. with fig. 163—165. Meanwhile, the number of burials inside the settlement of Khyinga has increased to more than 50 assured features (oral information H.-G. Hüttel, Bonn).

[2] A great part of the bones has been very badly preserved. Apart from the observation of the position of a few bones, the interpretation as flexed burial is justified by the very small burial pit.

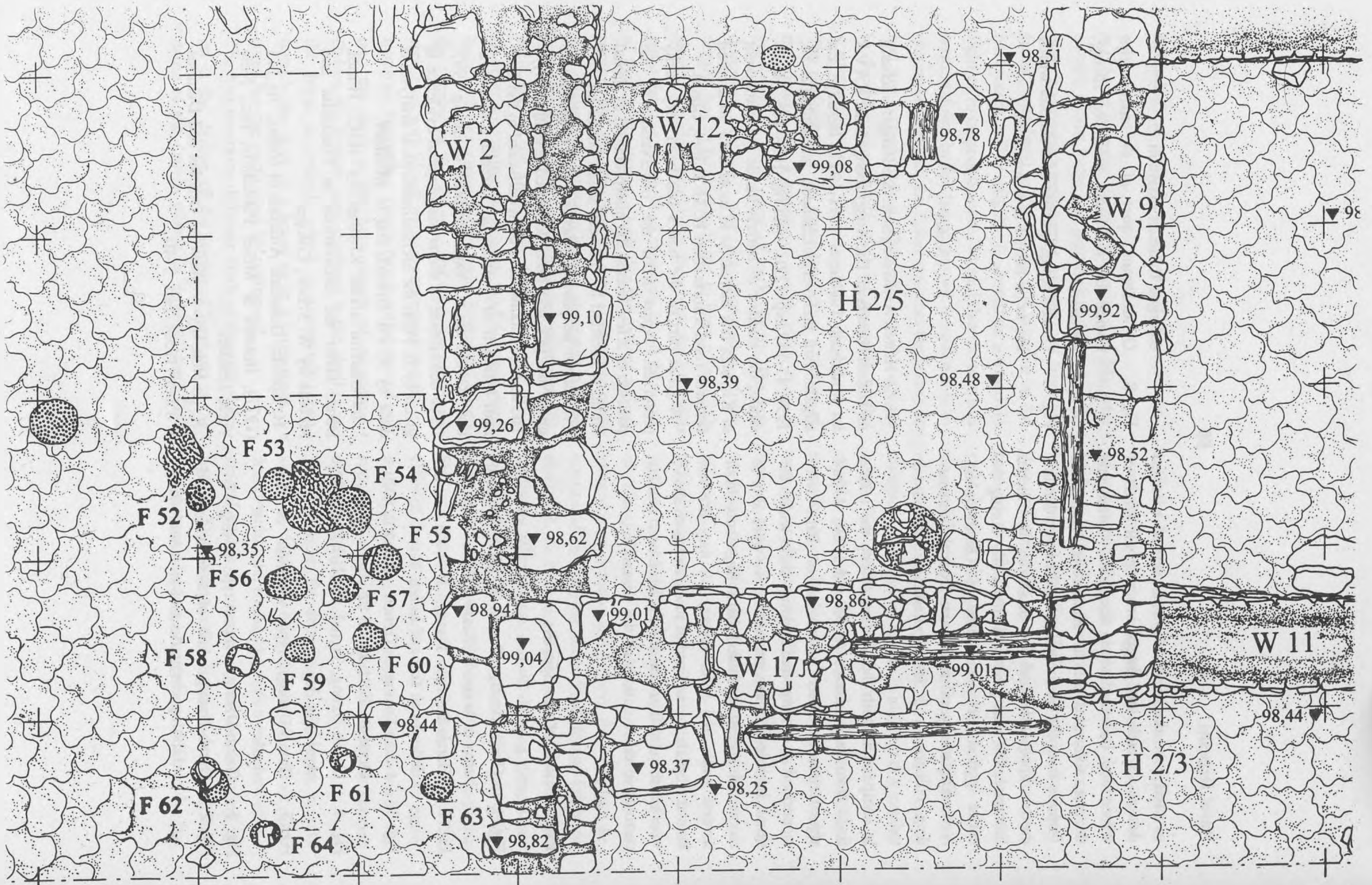
[3] It cannot be proved whether the pottery found inside the pits had been deposited intentionally. - The textile remains have been delivered to the German Museum of Textiles in Krefeld for restoration. Results are not expected prior to spring 1997.

[4] The description of the archaeological evidence is given by E. Pohl; the archaeozoological analysis is done by A. v.d. Driesch and H. Manhart.

[5] Information about Khyinga by H.-G. Hüttel, Bonn, about the excavations at Phudzelin and Mebrak by W. Schön, Cologne.

[6] H. Epstein, Domestic Animals of Nepal, fig.111 (1977), Holmes & Meier Publishers, Inc., New York, London.

[7] R. de Nebesky-Wojkowitz, Oracles and Demons of Tibet (1956), esp. 514ff.



W 2
W 12
98,78
99,08
W 9
99,92
H 2/5
99,10
98,39
98,48
98,51
99,26
98,52
F 53
F 54
F 52
F 55
98,62
98,35
F 56
F 57
98,94
99,01
98,86
99,04
W 17
W 11
99,01
F 58
F 59
F 60
98,44
98,44
98,37
98,25
H 2/3
F 61
F 62
F 63
F 64
98,82

Fig. 1

Fig. 2

Fig. 3

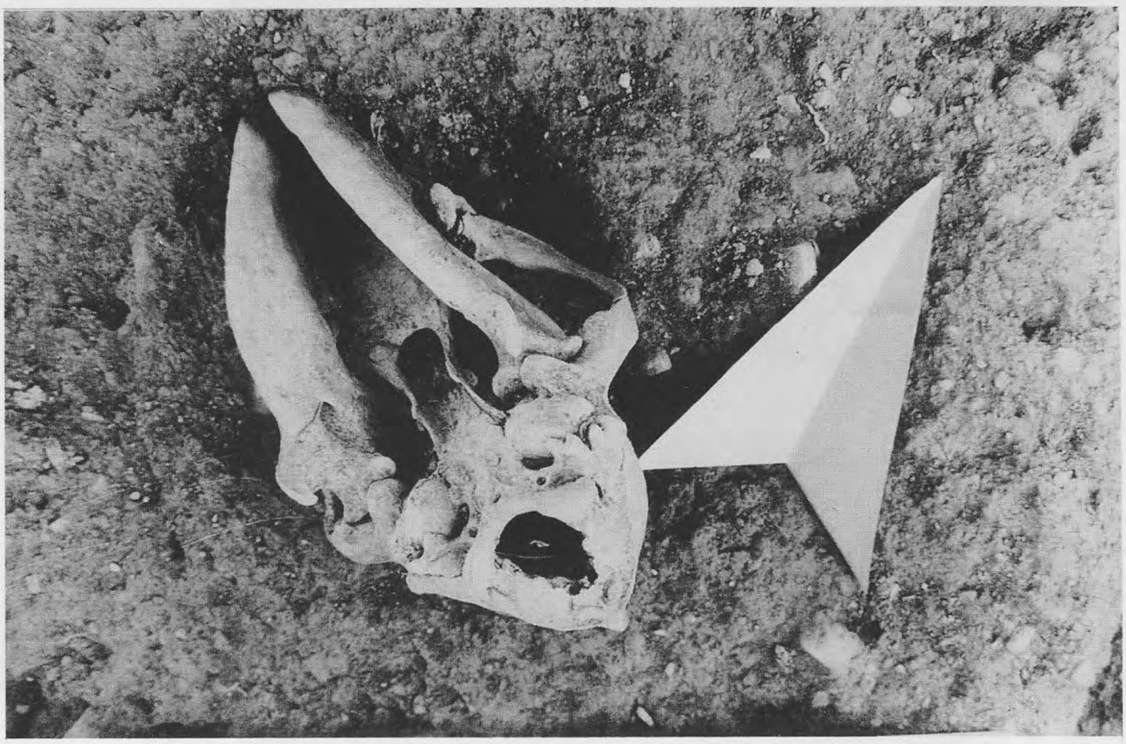


Fig. 4

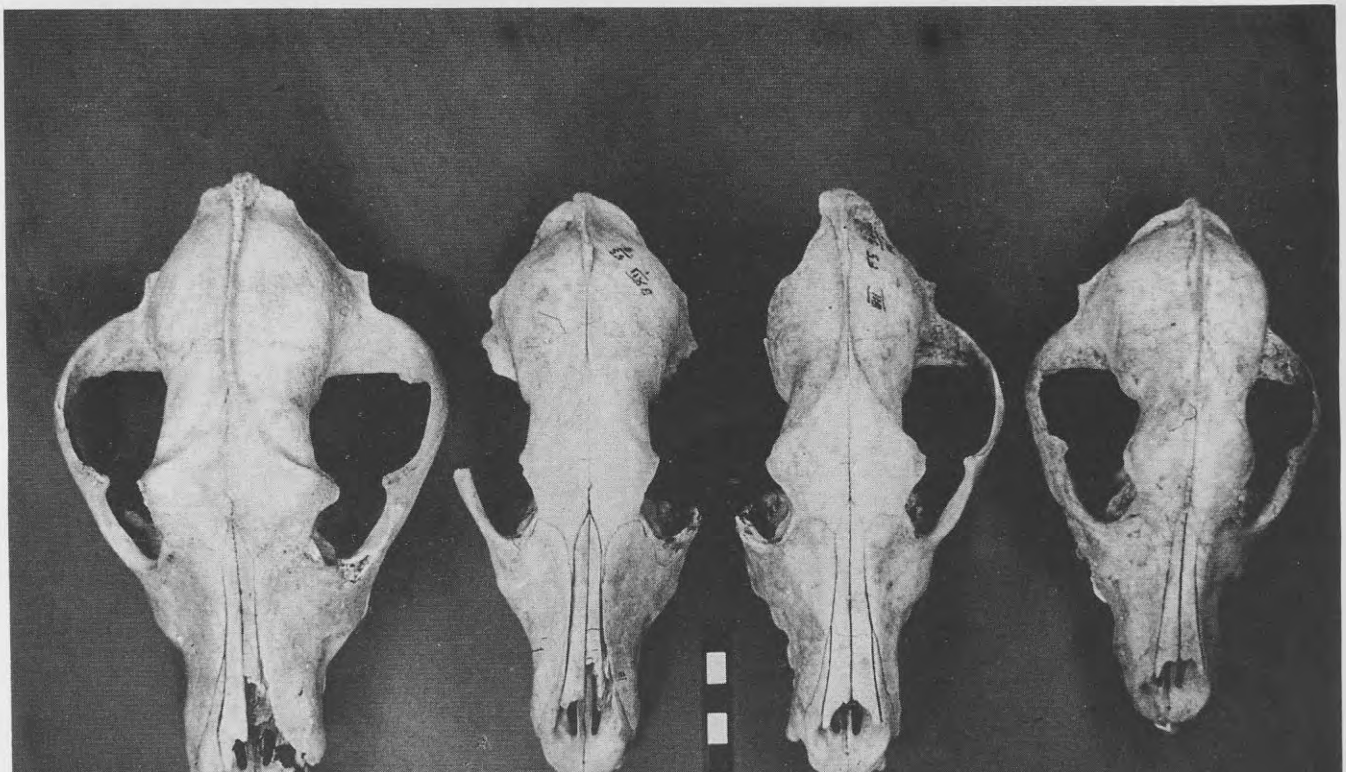


Fig. 5

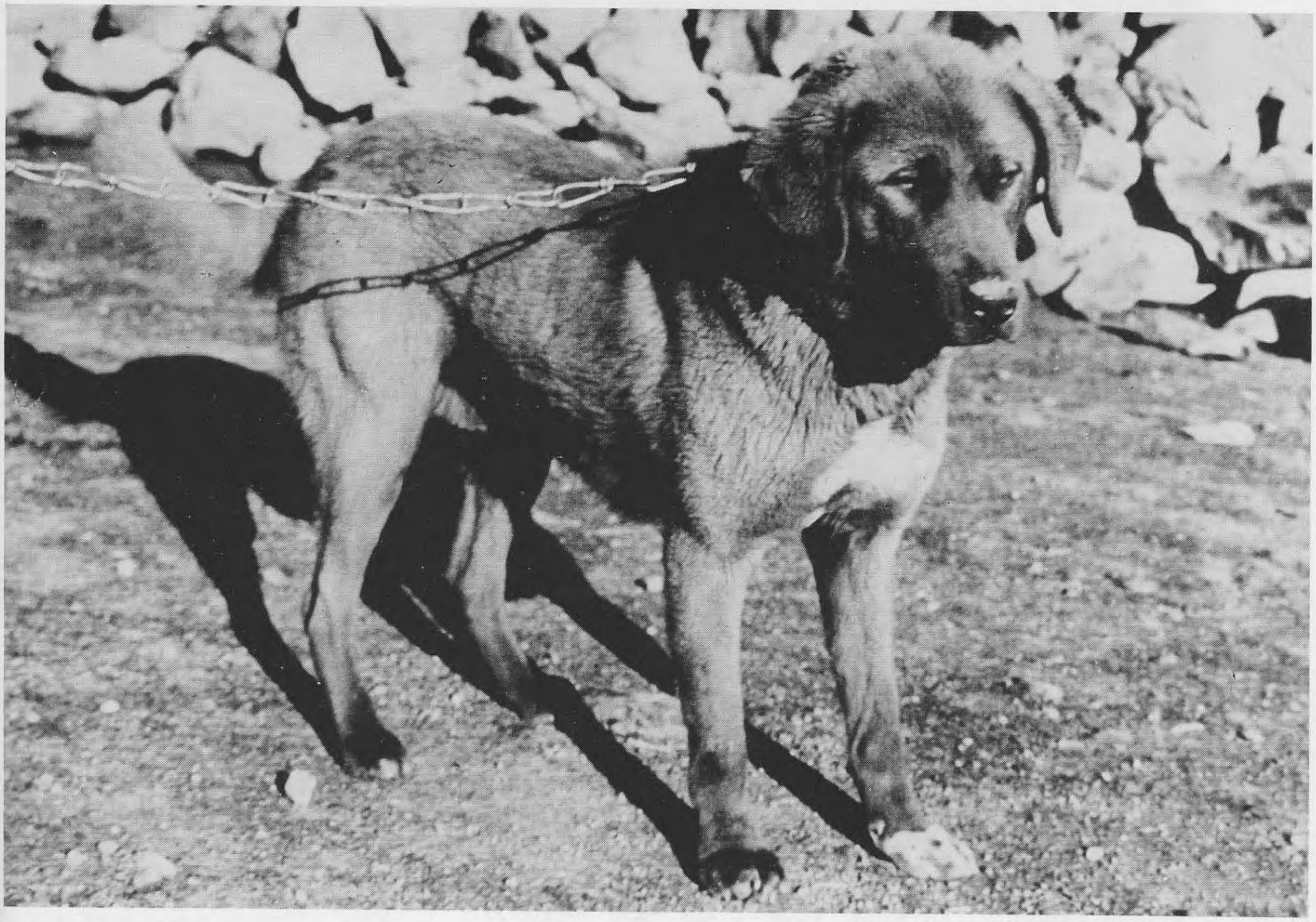


Fig. 6

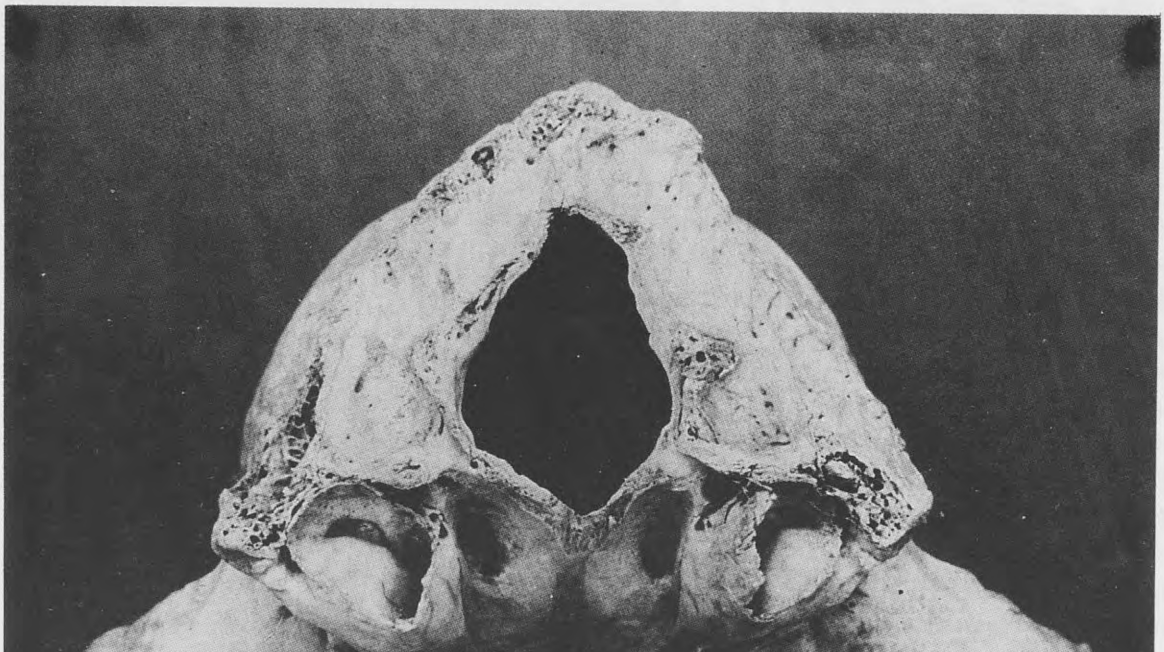


Fig. 7

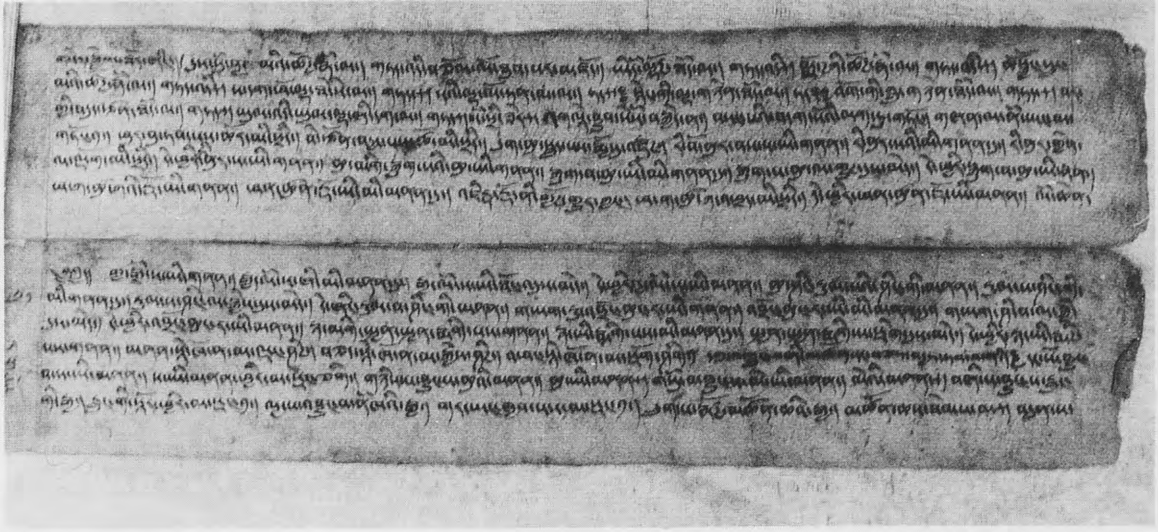


Fig. 8

Fig. 9

ARCHAEOLOGICAL RESEARCH IN MUSTANG

Report on the Fieldwork of the years 1994 and 1995
done by the Cologne University Team*

Angela Simons, Werner Schön, Sukra Sagar Shrestha

I. Report on the 1994 campaign

The excavation in the third year of the project (1994) took place from 1st March to 22nd May.
As in the previous years, our team worked in two regions of the southern Mustang District in Western Nepal:
1. in the funerary caves of Chokhopani in the Thakkhola (near Tukche and Marpha)
2. in the western cave systems, and
3. in the terrace settlement of Mebrak below the cave systems in the upper Muktinath Valley (near Jharkot and Jhong).

1. Work on the eroded cave burials of Chokhopani

Continuing the work done the years before (Simons et al- 1994a, 52f; 1994b, 93ff), we investigated the west face of the Chokhopani rock massif facing the Kaligandaki for further remains of funerary caves exposed by erosion (Plate 1).
Already in 1993, we had found a location in the shaft of the down-pipe of the hydroelectric plant, still in use at the time, where bones protruded from the trench profile. It became apparent that here were the collapsed remains of a funerary cave, probably with two occupation levels. As well as human bones and potsherds - remains of redeposited vessels - animal bones, including yak bones (determined by Prof. A. von den Driesch), were also recovered. These finds indicate that this site, like another about one hundred meters to the north, belongs to the more recent burial phase of the Chokhopani necropolis - dated to approx. 650 calAD - which, during our previous campaign, we found represented among the burial remains in the south face (Simons et al. 1994b, 95f).

While investigating the west face north of the down-pipe shaft, we came upon the remains of several caves. Their man-made nature was not clearly recognisable, but could not be definitely excluded either. Excavation revealed fragments of human bone, sherds of grey Chokhopani pottery and three broken schist points (bodkins) (Fig. 1). The finds date these funerary caves to the first occupation phase of the necropolis around 800 calBC. Consequently, after three years of excavation campaigns, we have evidence that both the west face - with the two down-pipe shafts - and

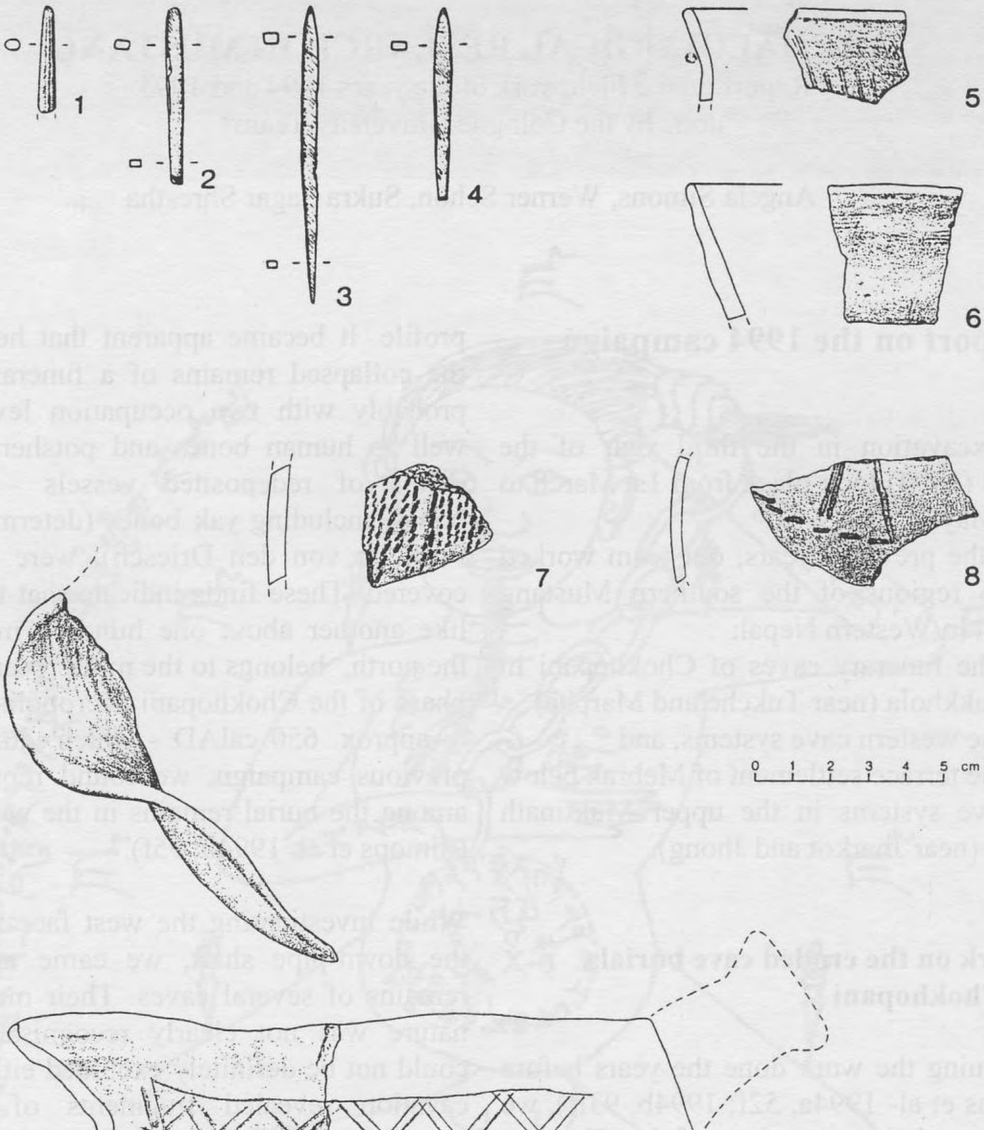


Fig. 1 Chokopani West Face (site 94.1): Points and pottery from the burial caves.

the south face of Chokhopani were used burial sites during two different periods separated by more than one thousand years. In addition, in 1992 and 1993, we were also able to secure traces of settlement from both periods. As the salvaged burial caves are severely eroded, it means that our work is genuine rescue excavation of finds which would otherwise be totally destroyed within the next few years.

The numerous grave goods - some even of museum value - (beads made of carnelian, shell, fayence; copper and bronze bangles; schist bodkins; ceramic vessels) (Simons et al. 1994a, Fig. 4-10.), together with the anthropological anaylsis of the bones, reveal a culture which lies at the very beginning of the settlement process in the high Himalayas. The relationship of the prehistoric necropolis to the second burial phase, which has been dated to more than a thousand years later, is unclear. The question also arises of what happened in Chokhopani during the time between the two burial phases so far dated by radiocarbon analysis. Further data which would permit an estimate of the duration of the occupation phases will perhaps be able to reduce the gaps. However, it is doubtful that there is cultural continuity. It is interesting to note in this connection that, still today, Chokhopani is used for ritual purposes by the local Thakkhali population (Vinding, pers. comm.).

2. Work on the cave systems of Mebrak in the upper Muktinath Valley

The work in "Cave System B" (sites 92.5 and 93.5) was continued and extended to "A-System" to the west (sites 94.2 and 94.3).

In **B-System** we wanted to excavate and record, layer by layer, the floor stratigraphy found in the sixth storey of the eastern section of Location 42 (Simons et al. 1994b, 102 with fig 13-14). The work confirmed that there had been at least three activity phases in this cave section, each characterised by a mud floor surface with settlement debris, with a period of abandonment after the second phase. According to our first data, the settlement of the cave system as recorded in this mud floor stratigraphy was between 1200 and 1600 calAD. The abandonment interval seems to have been around 1300; and - about a hundred years later - this section of the system appears to have been occupied again. As well as numerous potsherds, cereal remains, woven bamboo basket remains and worked pieces of wood, it was possible to salvage several fragments of paper with Tibetan script.

That season, we were able to expose a further stratigraphy at the foot of the western B-System. A flat area below the rock face has been consolidated with a terrace wall: apparently a connecting path and forecourt for the cave settlement. After exposing a profile it was possible to differentiate between several occupation

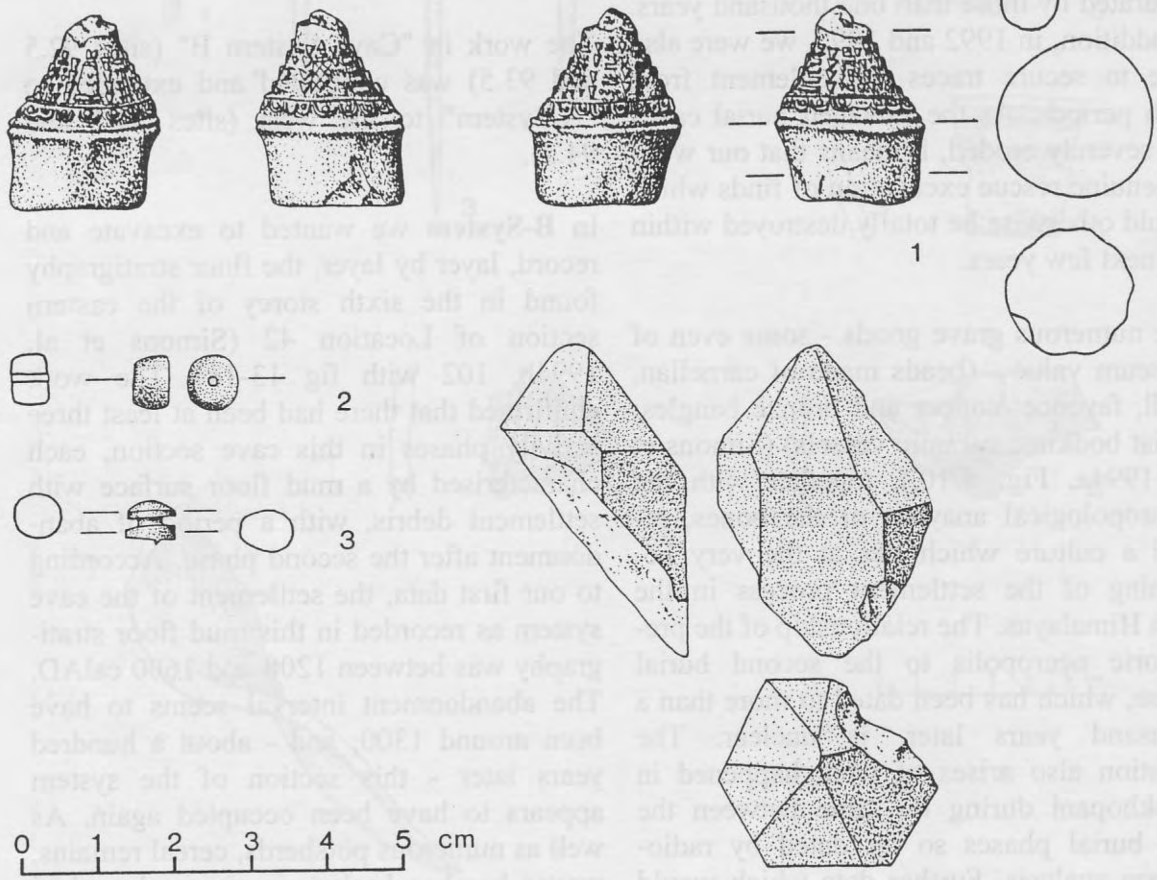


Fig. 2 Mebrak A-System (site 94.2), Location 2: Finds from the floor of the cave.

layers with organic remains, in particular threshing debris, and potsherds which are expected to correspond with the settlement phases of the cave system.

On the western edge of the south-exposed face of the rock massif of Mebrak are the caves of the **A-System**; they are in two groups, adjacent to the western section of the B-System.

The eastern A-System consists essentially of two rows of caves, one above the other. Most of them are severely eroded and some were used for a long time by vultures as a nesting place. Two well-preserved rooms, Locations 2 and 8, could be examined. These cave rooms, too, were eroded at their entrances; in both cases the last inhabitants had built up the broken entrances with a wall, leaving only a door opening. It became apparent that Location 2 had originally had an anteroom which had, however, completely succumbed to erosion except for part of its floor. On the mud-dressed remains of the cave floor, which now only exists as a ledge on the rock face in front of Location 2, were the remains of crushed ceramic vessels.

In the Location 2 cave room itself, a box-shaped mud-brick structure had been preserved in the east corner. Under the collapsed mud bricks in the entrance a hearth came to light plus several finds which indicate that the last inhabitant of this room was probably a buddhist hermit; a stupa-shaped Tsatsa made of baked clay, a piece of rock-crystal probably used as an amulet, a bone button and a shell bead (Fig. 2). Furthermore, there were several heavily eroded iron objects, potsherds and cereal remains.

In Location 8, five niches were arranged radially around the main room. They were originally sealed with mud-brick walls; provisions had been stored in these domed structures. In the centre of the room, under the collapsed material, we were able to uncover an earth floor with a hearth.

The evidence of settlement in these two well-preserved rooms - judging by the ceramic finds - probably comes from the last occupation of the cave system (from around 1300 to 1600AD). A first dendrochronological dating of this last phase points to around 1600 AD, which would suggest that the A-System was abandonned at about the same time as the B-System.

The **Western A-System**, right at the top of the Mebrak range, consists of a series of cave remains lying on either side of an erosion gully. Almost all are severely eroded and some therefore look as though they are natural caves formed by erosion. In order to clarify the question whether they are artificial and were used by humans, trial trenches were dug in some of the rooms. We came upon potsherds and bone fragments which were sometimes within the infill layers of artificially hewn hollows or pits in the rock floor. Surprisingly, the pottery excavated - together with human bones and a carnelian bead - were sherds of vessels of the grey ware which we had met in the first occupation phase of the Chokhopani funerary caves (cf. Fig.1.) (radiocarbon dated to approx. 800-500 calBC). It seemed at that time already most probable that we had discovered a necropolis in Mebrak in the upper Muktinath Valley which is comparable to that of Chokhopani in the Kaligandaki Valley. We were not able to complete the work in the western A-System; in the1995 campaign, we hoped to find some better-preserved funerary caves. This - in our eyes, sensational - find shows that collective burials in funerary caves like

those in Chokhopani were distributed throughout the whole Mustang area, and are linked with the first occupation of the cave systems. In Mebrak in the upper Muktinath Valley and also in Phudzeling in the lower Muktinath Valley is the earliest evidence in the cave systems in this period. The link with the same burial tradition makes it seem possible that in prehistoric times, around 1000-500 BC, a homogeneous population once lived where several different ethnic groups live today. Perhaps this will help us learn more about the people who first settled in the high mountain area of Mustang and built the first cave systems. Our work in the ruins of Phudzeling and Mebrak shows that already in prehistoric times, around 1000 BC, they had build their settlement on the open areas on the river terraces in front of the rock faces.

3. Excavation at Location 6 in the ruins at Mebrak in the upper Muktinath Valley (site 92.5)

Parallel to the work in the cave system, we continued the 1993 excavation in one of the ruined houses in the deserted settlement on the river terrace in front of B-System (Location 6).

In order to determine the extent of the building, the north wall was followed to both the east and the west. The western end was reached after 1.50 m, where the wall makes a sharp bend and continues towards the north. 3 m along the eastern side of the building, beyond the area excavated in 1993, it joins a feature measuring 2 x 3 m: the wall ends at a huge boulder lying deep in the sediment, on which a mud platform has been built. The platform is bounded on the right-hand side by a low wall and, on the left, by a series of large stones. In the centre is a line of mud bricks which are inserted into the mud platform parallel to the right-hand wall. It is intended to look into the purpose of this feature next year, as the local excavation workers lead us to understand that similar structures could be connected with the processing of cereals. In addition, adjacent to last year's excavation, a partial extension along the east wall towards the south was excavated. As a result, we have now investigated an inner room, walled on three sides, which was obviously entered via a staircase in the south-west corner. The southern boundary of this room consists of a passage only about 1.50 m wide which - continuing further in the eastern area - falls off slightly towards the east. On the northern side, the chronologically later wall of the ruin, still preserved above ground, hinders further investigation.

The extensions of the excavation permit a detailed insight into the chronological utilization of the inside of a building. Thus, beneath the occupation layer dated to 1514 70 calAD, six further mud floors were determined from which samples and finds could be recovered.

In a level layer at the base of this succession of layers, at a depth of 1.50 to 1.80 m below the present-day surface, pottery was found which corresponds with material from the Chokhopani phase funerary caves. This

level layer lies on the natural rock surface and seems to represent the preparation of the foundation for the first construction of the terrace settlement in front of the cave system (Plate 2). The samples at present in the laboratory for radiocarbon analysis will give further information on the duration of the building's utilization and thus provide an insight into the entire development of the settlement in front of the rock face. From all the layers, it was possible to obtain not only sherds of settlement pottery but also plant remains, animal bones and charcoal as well as several corroded iron objects, including an arrow head.

In 1995, it was intended to extend the section and follow the individual walls in order to obtain a larger-scale insight into the structure of the earlier settlement.

II. Report on the 1995 campaign

Our fieldwork during our campaign in the field took place from March 30th to May 8th 1995.

That year we worked only at the site of Mebrak situated in the upper Muktinath Valley in the South of Mustang District in Western Nepal. As we had worked at this site from 1992 onwards we had a few specific questions which we wanted to try to answer during our excavation in that spring:

1. Concerning the cave systems:
1.1. Did we really hit a Chokhopani-type burial site in the western part of the A-System ?
1.2 Was there any special feature in the uppermost cave of the eastern B-System ?
2. Concerning the terrace settlement:
2.1. Does stratigraphy and chronology inside the building units of a larger compound change?
2.2. How is the spacial layout of the ruin site in the last stage of construction?

1. Work in the cave systems

1.1. The western A-System

We found out that the very eroded caves along the gully in the western A-System indeed are the remains of burial caves of the prehistoric Chokhopani-period. Inside the caves the dead were deposited in cylindrical pits - one above the other - and then covered with slaps of schist. Together with them some pottery vessels and ornaments as well as a few points made of schist were buried. The vessels are of Chokhopani-type but with a slightly developed shape and decoration (Fig. 3.1). Only in one grave-pit we found bracelets and bangles; all were made of iron (Fig. 3.2-4 after restoration).

As this section of the rock cliff is very much exposed to erosion many burials are eroded and and thus no longer undisturbed. But we definitely found a prehistoric burial site which seems to be linked to the end of the period specified by the Chokhopani-

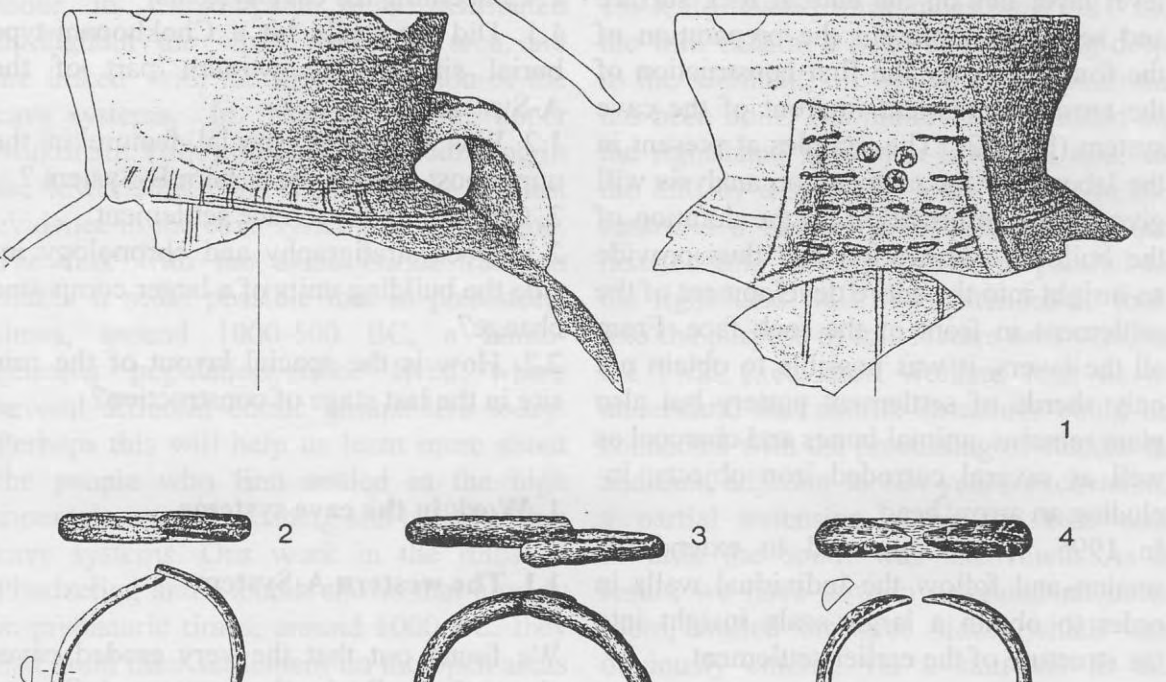


Fig. 3 Mebrak Western A-System (site 94.3), Location 2: Pottery and iron bangles from the burial cave.

ware which we named the "Chokhopani-Phase" of Mustang prehistory (about 1000-500 calBC).

1.2. The uppermost cave in the eastern B-System (Mebrak 63)

A very small cave entrance in the seventh storey of the easternmost section of the B-System at Mebrak, towering some 30 m above the foot of the rock face, created great problems when the spelaeologists tried to provide access to it. Below it there were some eight meters of very brittle rock which meant that the approach was very dangerous. When we finally succeeded, we gained access to a very special feature: the small cave (5 m x 2 m) proved to be a prehistoric collective burial site. There were

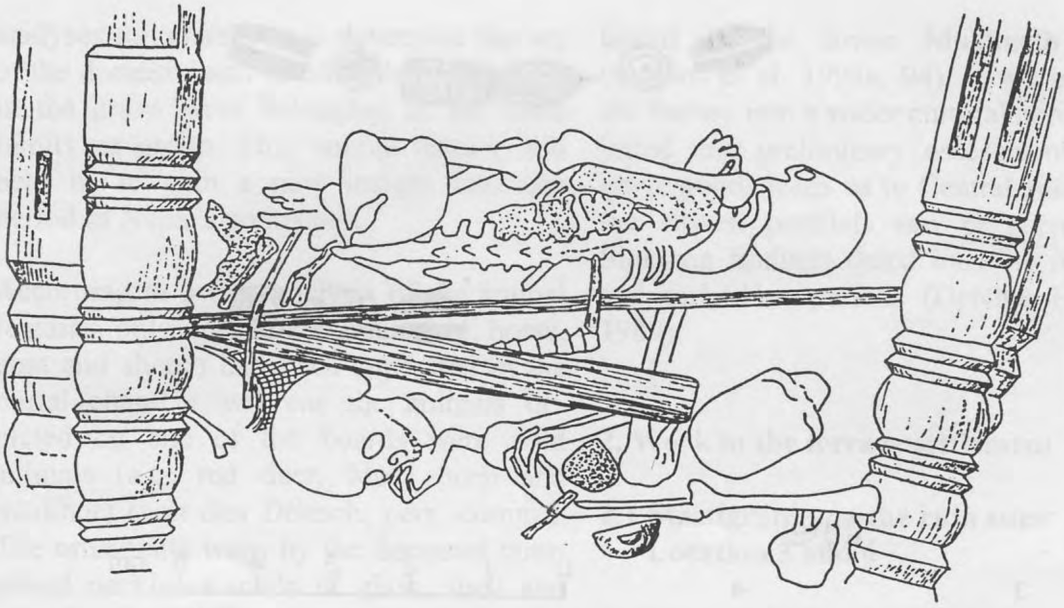


Fig. 4 Collective Burial Mebrak 63: Stratigraphy of the eastern bed coffin.

three bed-like wooden structures which were carved and partly painted (Plate 3 below, Plate 4). The boards were worked with an adze and elaborately fitted together. The bed coffins are now partly collapsed down and covered by a thick layer of bird-droppings and nesting materials. At first glance one could already see the remains of nine corpses which had been deposited over a period of time. Because of the dry climate the human remains were partly mumified, and leather and textile garments partly preserved. Pottery and wooden vessels could also be seen on the surface (Plate 3 above).

As excavation proceeded, this burial cave proved to be even more intriguing: We were able to recover the remains off at least 30 individuals who had been placed there over a period of about 350 years, according to the first results of the dendrochronological analysis of 30 wooden boards combined with radiocarbon dating. Obviously the deposited bodies were moved and placed aside as soon as a newly desceased person had to be buried. (This practice is known from many Megalithic sites in India and also in Europe.) Therefore most of the skeletons uncovered in the western section were dismembered and without heads while the skulls were deposited in one corner.

On and under one of the wooden bed-like structures were three layers of corpses - bound with cloth bands into a crouched position - deposited consecutively one

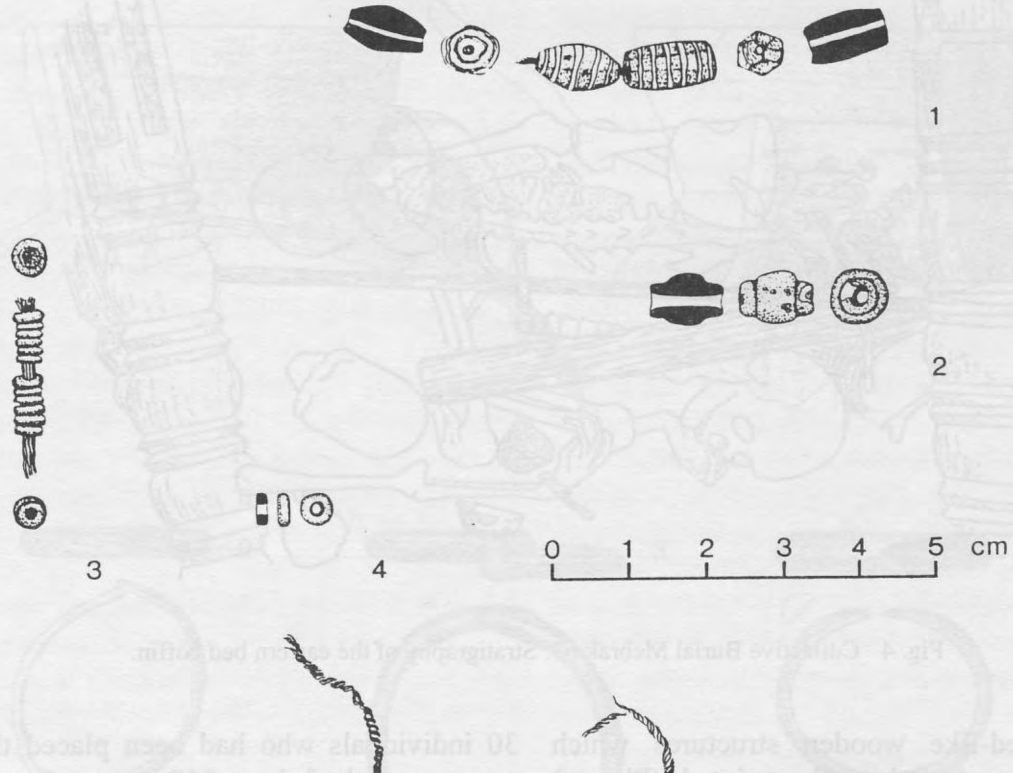


Fig. 5 Collective Burial Mebrak 63: Beads - carnelian (1), glass (2-3), shell (4), seeds (5).

above the other (Fig. 4). There is the unique chance to reconstruct the woolen and leather garment (Plate 6 above) which is being worked by a specialist in Germany. Most important are the anthropological analyses which may help solving the problem where the prehistoric inhabitants of Mustang derived from. Scientists from four German universities work on the skeletal material. They try to find out, for example, which diseases the deceased persons were suffering from and which diet they were eating. (Thus one can partly reconstruct the former environment). Genetic

analyses can enable us to determine the sex of the deceased and whether the individuals in the grave were belonging to the same family or group. This unique feature will help us to gain a new insight into one period of Nepal's prehistory.

According to a first analysis of the animal remains, only domestic animals (e.g. horse, goat and sheep) had been deposited in the burial chamber whereas the animals depicted on one of the boards were wild animals (e.g. red deer, blue sheep and markhor) (von den Driesch, pers. comm.). The ornaments worn by the deceased comprised necklaces made of glass, shell and carnelian beads (Fig. 5) and some bronze bracelets. The dry climate had preserved a number of objects made of organic material such as baskets of varying shapes and pleached patterns (Plate 6 below), bamboo mugs, wooden bowls (Plate 5), a wooden bow, a bamboo flute etc.

It was, of course, most important to obtain an absolute dating of this burial cave. Now we received a number of radiocarbon dates from the laboratories of Cologne, Utrecht and Heidelberg. They come from bones, wood, basketware and seeds of the different layers of the grave. The dates range from around 350 calBC for the first burials to the first century calAD for the final depositions. Deriving from this special burial cave we named this period the "Mebrak Phase" of Mustang prehistory (about 400 calBC to 50calAD). In Mustang, we are already able to connect the grave to the 1992 findings in the terrace settlement of Phudzeling situated in the lower Muktinath Valley (Simons et al. 1994a, 94). If we try to set the feature into a wider cultural context, our initial and preliminary assessment of the grave goods leads us to Central Asia where the closest parallels can be seen in the Sinkiang findings dated into the Iron Age and early Han periods (Debaine-Francfort 1989).

2. Work in the terrace settlement

2.1 Stratigraphy in the ruin sites Location 3 and 6

In the ruin site in Location 6, we opened trenches adjoining to the east those we excavated last year. One of the questions for our research concerned the oldest layer in the ruin site which seems to have been a levelling stratum before any of the buildings were erected. This layer contained a grey prehistoric pottery ware belonging to the "Chokhopani-phase". We also found it overlying the natural rock surface in the new trenches so that it evidently was a preparation of the construction sites prior to the first building activities.

In the layers above we uncovered some wall systems which obviously constituted small habitation units each measuring about six square metres. The number of mud floors, however, differed in the two rooms excavated: the more western room contained only three layers while the eastern room had 6-8 ocupational floors, one above the other.

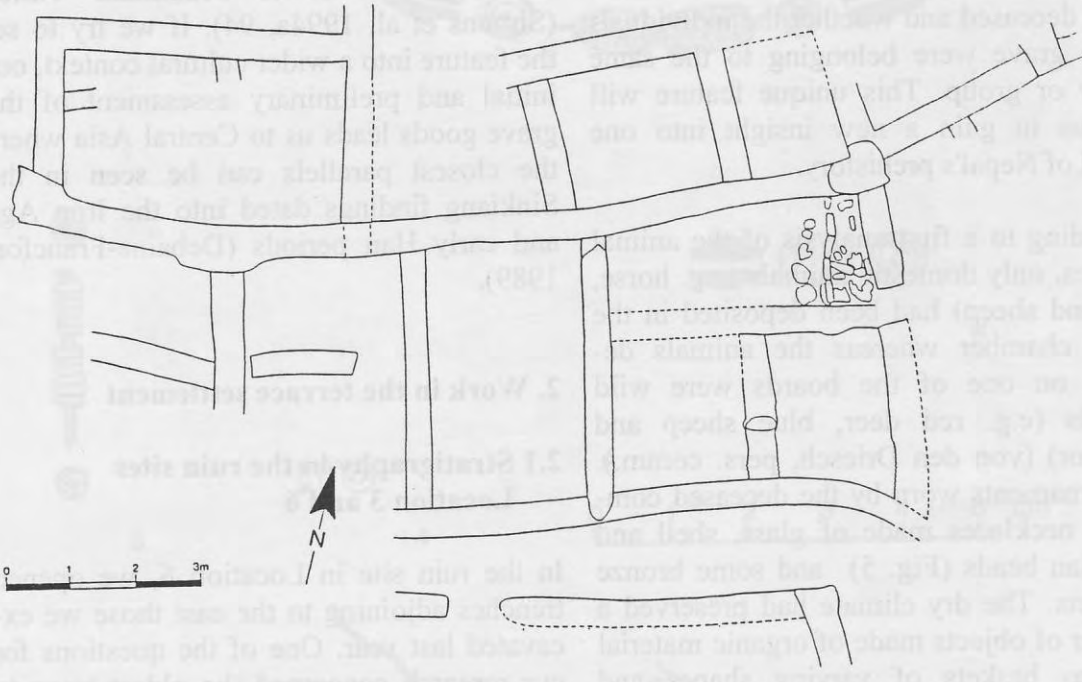


Fig. 6 Site plan of the excavated walls in ruin Location 6 in the terrace settlement.

In Location 3 situated to the northeast of Location 6 (towards the slope) we excavated a trench down to a depth of nearly 3 m following a wall built of big boulders which was constructed in order to retain the slope detritus eroded from above. We hope to connect the occupational layers of this trench to those of Location 6.

2.2 Spacial layout of the terrace settlement

In order detect the spacial organization of the last stage of the settlement we followed the wall systems near the surface to the north and east of Location 6. It seems that the pattern of small rooms and units continued across a wide area so that it is nearly impossible to determine definite boundaries between the single compounds. This does not seem astonishing as the nowadays pattern in the village-layout of Mustang is very similar.

A special feature was the burial of a headless juvenile whom we found deposited above the last occupational level of the house together with three metal bangles. It will be interesting to find out the meaning of this feature - maybe the anthropologists can help with the interpretation.

Note

* We extend our sincere thanks to the Director and the staff of HMG Department of Archaeology for their valuable contribution during our joint excavation. We also would like to thank the inhabitants of the villages of Marpha, Dzong and Dzarkot in Mustang District for their kind cooperation. In the fieldwork of the 1994 and 1995 campaigns - apart from the two archaeologists of Cologne University (Angela Simons and Werner Schön) - our Nepalese counterpart of HMG Department of Archaeology (Sukra Sagar Shrestha) participated as well as a draftswoman (Silke Haase), altogether six students (Martin Fischer, Thomas Kyll, Christian Nockemann, Svenja Schmitt, Angela Vielstich, Markus Westphal) and three spelaeologists (Daniel Gebauer, Uwe Scherzer and Christoph Harlacher) and local helpers. The then Director of HMG Department of Archaeology Mr. Kadgaman Shrestha as well as the lecturer of archaeology of Tribhuvan University Mr. Madan K. Rimal and the senior advisor Mr. Janak Lal Sharma visited our sites.
The authors hereby thank all the paticipants of the fieldwork for their skillful and dedicated help and suggestions.

References:

Debaine-Fancfort, C. (1989) Archéologie du Xinjiang des Origines aux Han (2). Paléorient 15/1, 1989, 183-213.

Schön, W. (in print) Investigation of Settlement Sites with House Ruins and Abandoned Fields in Muktinath Valley, Nepal. In: Proceedings of the 13th Conference of the European Association of South Asian Archaeologists in Cambridge 1995. South Asian Archaeology 1997, 841-850.

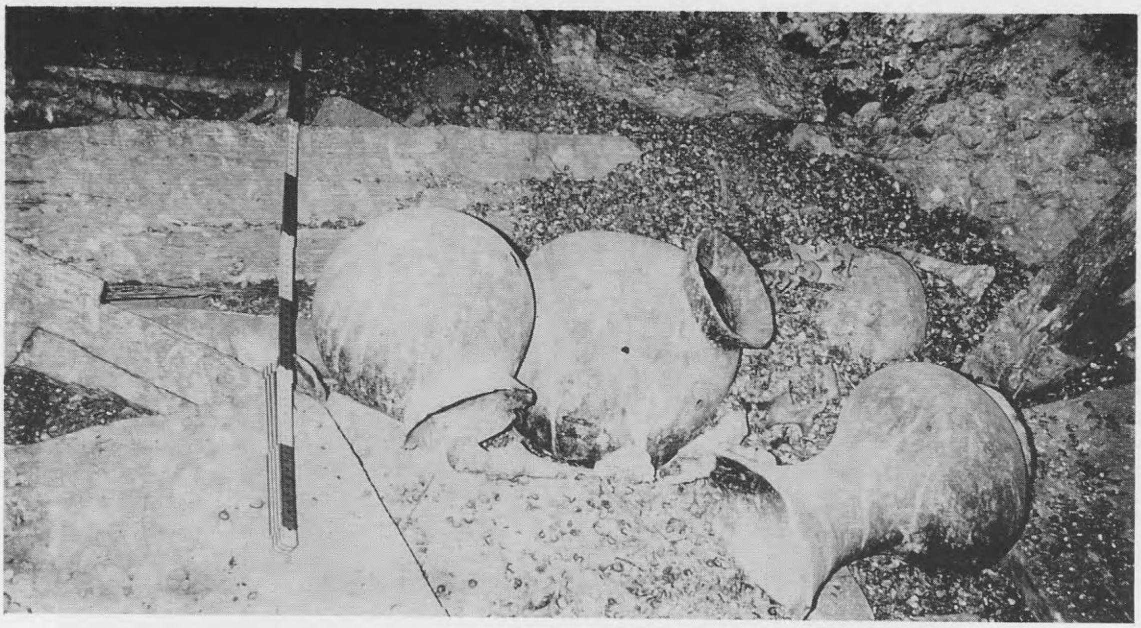
Simons, A. (in print) The Cave Systems of Mustang - Settlement and Burial Sites since Prehistoric Times. In: Proceedings of the 13th Conference of the European Association of South Asian Archaeologists in Cambridge 1995. South Asian Archaeology 1997, 851-861.

Simons, A., Schön, W. & S.S. Shrestha (1994a) Preliminary Report on the 1992 Campaign of the team of the Institute of Prehistory of the University of Cologne. Ancient Nepal 136, 1994, 51-74.

Simons, A., Schön, W. & S.S. Shrestha (1994b) The Prehistoric Settlement of Mustang. First Results of the 1993 Archaeological Investigations in Cave Systems and Connected Ruined Sites. Ancient Nepal 137, 1994, 93-129.

Plate 1 Remains of prehistoric burial caves in the West Face of Chokhopani.

Plate 2 Mebrak: Ruin Location 6, Trench 604. Northern wall. Below the boulders one can see the prehistoric level layer upon which the foundations of the first walls were constructed.



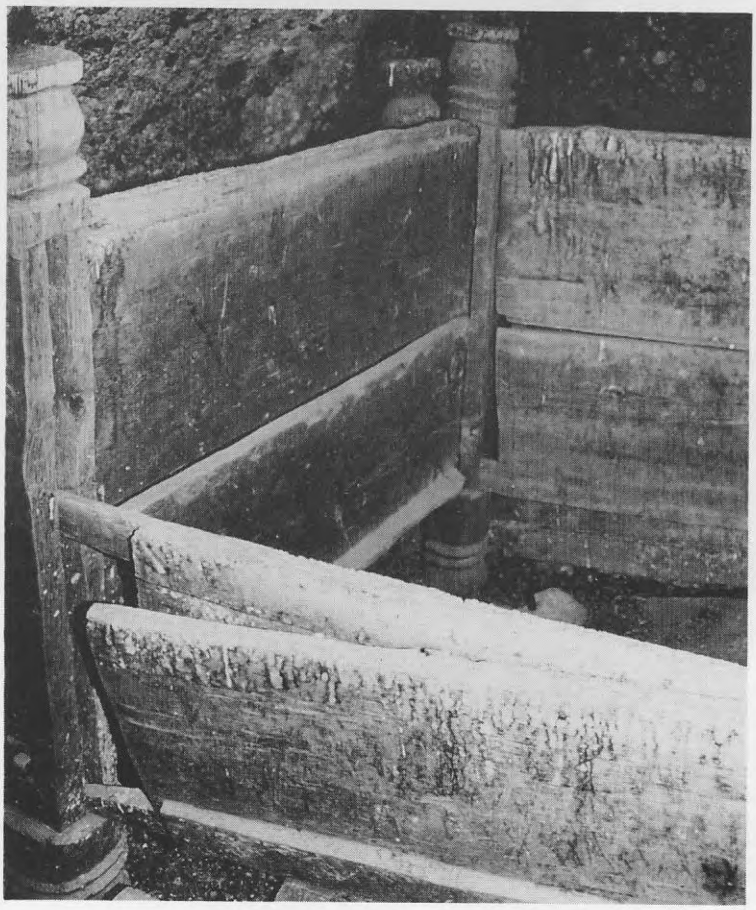


Plate 3

The collective grave Mebrak 63:
above: Pottery vessels in the western part of the cave.
below: One of the wooden bed coffins.

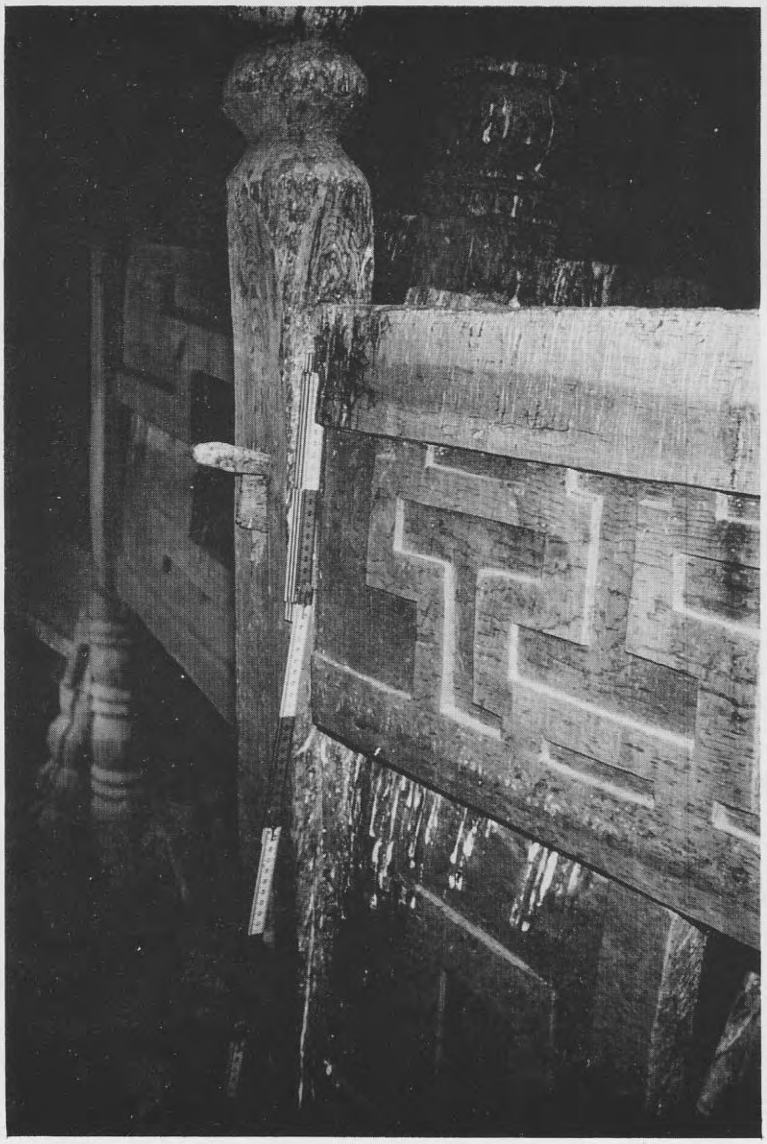


Plate 4: Grave Mebrak 63: Carved ornaments on the wooden bed coffins.

Plate 5 Finds in the collective grave Mebrak 63:
above: gourd with incised ornaments; below: wooden vessel.

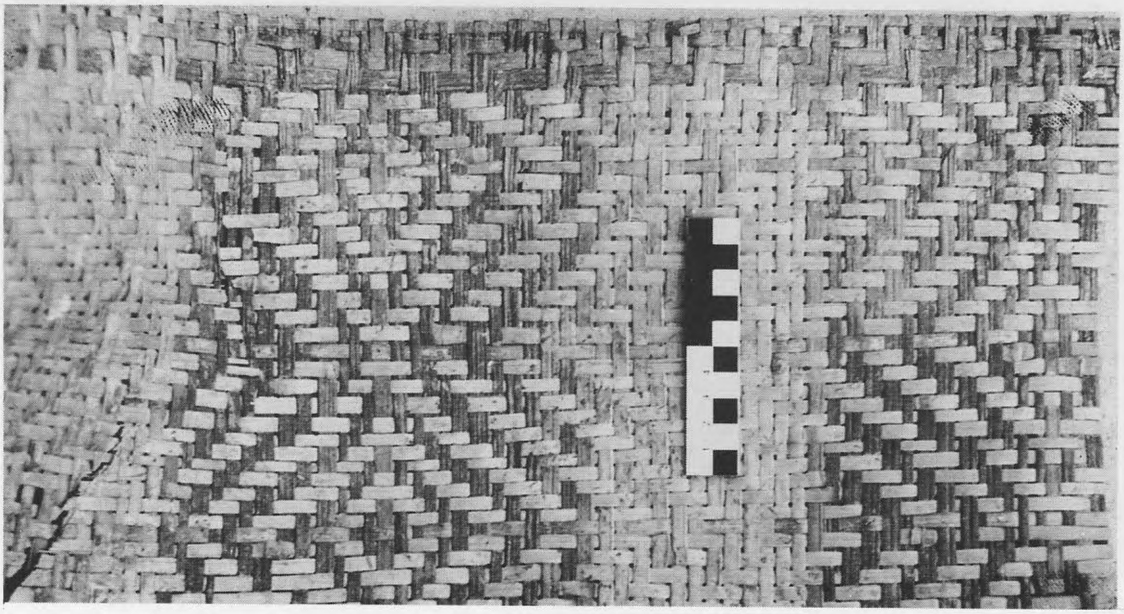


Plate 6 Finds in the collective grave Mebrak 63: above: leather boot; below: basket.

Excavations at Gotihawa

A note on the results obtained during the first excavation campaign in winter 1994-95

—Giovanni Verardi

In the winter 1994-95 the Nepali-Italian team (Department of Archaeology of HMG, Kathmandu; Lumbini Development Trust, Lumbini; Istituto Italiano per l'Africa e l'Oriente, Rome) began its activity in the Kapilavastu District of the Terai. As most readers are certainly well-acquainted with the nature of at least some of the sites of the region and the questions involved, I will limit myself to bring to their attention the fact that up till now the most noticeable information on these sites has been from S.B. Deo (1968) and D. Mitra (1972); that excavations at Tilaurakot and Lumbini have been carried out by Nepalese as well as by Japanese archaeologists (Mishra 1977; Nakamura 1978; Rijal 1973, 1974, 1975-77, 1979, 1996); and that an analysis of the archaeological evidences of the region in relation to the still unsettled question of the identification of Kapilavastu was made by Haertel a few years ago (Haertel 1991). It must be noticed that the territory of the District is crowded with sites, which are much more numerous than commonly believed or even reported in the literature.

Our excavation work focussed on Gotihawa, a well-known site because of the presence of the stump of an Ashokan pillar, which is situated to the *southwest of Taulihawa at about two kilometers* east of the present-day course of the Banganga river, and is apparently related to the large Pipri mound half a kilometer away. Like other sites of the plain, that lie on relatively high lands (which protects them from seasonal floodings and the periodical migration of rivers), it lies on a sandbar. It is made of a number of small mounds, partly cleared from the huts built on them and partly still hidden under the present village.

The stupa mound has been attracting the attention of researchers since the end of the last century, when Major L.A. Waddell cut a narrow trench connecting the centre of the stupa with the pillar - a digging partly documented by P.C. Mukherji in his Report of 1901 (pp. 31-33; here see fig. 6). We availed ourselves of the old trench, reopened it, and

dug deeper so as to control the internal structure of the monument and the layers below (figs. 3, 8). Waddell's trench, however, was not reopened for all its length, and both its ends, affecting the central part of the stupa and the Ashokan pillar respectively were left untouched (fig. 2). As to the western end of the trench, it must be noticed that in 1959 the pillar was given a sort of monumental arrangement, which caused the trench to be cut and obliterated (figs. 1, 2, 7).

I. The stupa.

The stupa (figs. 1, 3, 8-11; the reader is especially referred, here and in the following pages, to the section shown in fig. 3) appears below the layer of humus and layer 3, and shows damage caused by the long frequentation of the site after its final abandonment (out Period IV; see fig. 5). Two building Periods (our Periods III and II) have been recognized.

The early stupa is an apparently tight-connected, brick-made structure. It is still unchecked, but seems to be made of concentric rings of bricks. An outer pavement (25), the *pradakṣināpatha,* is related to this early building. The bricks are rectangular and wedge-shaped, contain are large amount of rice husk as temper, and are ill-baked. A few of them bear marks in the shape of crosses, crosses within circles, or circles internally barred (figs. 12-14). In this Period the diameter of the monument was ca. 19,5 m. The dating of the stupa at this stage is highly conjectural, although there are reasons to believe that it was built in the 3rd century B.C. It can be surmised that it is contemporary with the erection of the pillar nearby, but nothing certain can be said on this at present. As to the pillar, it appears from the longitudinal section (fig. 2) that it is placed below the original ground level, and we cannot even say if it stands in its original position.

The second building Period is characterized by the addition of two more rings (38, 37) and the laying of a new *pradakṣināpatha* (35) at a higher level than the previous one. It is worth noting that the new rings are made of rectangular bricks only. As before, the stupa ended abruptly with a low vertical side, but it had now a diameter of about 21,5 m, being therefore the monument measured by P.C. Mukherji, according to whom the stupa at Gotihawa had a diameter of 68 feet (Mukherji 1901, p. 31). The outermost ring (37) eventually collapsed (see layer 48), after which the stupa was deserted. Later occupation shows the presence of local, non-Buddhist cults. It can be conjectured that the enlargement of the stupa was carried out in Saka and Kushana time (from the end of the 1st century B.C., in this part of the subcontinent, to the 2nd-3rd century A.D.), but no proper archaeological evidence is available as yet for stating this. A more careful examination of the monument will be possible when a larger part of it is exposed, and a safer chronology will be given when materials related to the two building Periods are found.

Both in Period II and III the monument corresponds, typologically to other stupas of the region, as for instance to the so-called Suddhodana stupa at Damnihawa outside Tilaurakot (Rijal 1973, pl. IX) and to the unexcavated one at Beluhawa (ibid., p. 63).

II. The Pre-stupa Deposit

Our attention should turn now to the sequence preceding the building of the stupa, which is not yet firmly established, but which gives important evi-

dence for the chronology of the site. In particular, a *post quem* comes from a charcoal found in trench MMK to the west of Waddell's trench (figs. 1, 3).

1. The *Northern Black Polished Ware* and the Animal Bones

In the sandy-silty layers (26, 33) immediately below the stupa and towards its centre, small fragments of *NBPW* were found in association with small charcoals and animal bones. The *NBPW* sherds allowed us to reconstruct several forms, all globular bowls with thin walls (fig. 17), which points to the presence of a high-standard, specialized production. We could not instead, up till now, confront ourselves with the numerous questions concerning the manufacturing of the ware. The sherds display a polished black and/or red surface, and may have an outer red surface with a black inner one or viceversa.

As to the bones, their finding was, at the same time, expected and of the greatest interest. "A large number" of them, along with teeth which "were many and certainly belonged to animals" (Mukherji 1901, p. 32) had been found one century ago at about 50 cm below the first row of bricks at the centre of the stupa. John Irwin, in one of his papers, considered this piece of information as evidence that the stupa at Gotihawa was not a Buddhist monument - a stimulating but unlikely hypothesis (Irwin 1977, p. 815). The bones found by us have been examined by Jacopo De Grossi Mazzorin of the Soprintendenza Archaeologica di Roma, who succeeded in identifying some of them. The species *bos indicus* predominates in the sample, which yielded also two remains of *gallus gallus* (cock). The bone fragment of a rodent and that of an unidentified reptile (most likely late intruders) were also identified. The fragment of the pelvis of a *bos* shows clear traces of slaughtering by means of a sharp tool (figs. 15-16). The blow was struck at the height of the pectineus line, and the pelvis was broken.

The *NBPW* sherds and the bones seem to be concentrated below the central part of the stupa, and seem to be related to a layout made of unbaked bricks (?), of which only a few traces have been observed up till now. If confirmed, this would be the evidence of the existence of a pre-stupa structure connected with the use of selected shapes of a high quality pottery (the *NBPW*) and the consumption of animals' meat and/or animal sacrifices.

We do not have objective data for giving the absolute chronology of this part of the deposit, and we must therefore rely upon the dating of the *NBPW*, which varies according to the evidence from different sites and to scholars' views. The 7th-6th century B.C. can be taken as the beginning of this period (our Period I), which lasted up till the construction of the stupa.

2. The Pottery of Prehistoric Tradition and the C14 Dating

Waddell's trench reached a depth of only about 30 cm below the first row of bricks of the stupa (the depth was greater only at the centre of the monument). At the southwestern corner of the trench, we dug up to the height of 2,14 m from our Point O (i.e. the top of the remains of the Ashokan pillar), reaching the level of the water-table below the upper interface of the sterile clays. A deep digging was also made in Trench MMK, but without reaching the water-table. The layers which can be seen in the section of fig. 3 (27, 28) have

vanishing, uncertain limits, and even the base of layer 28 can be distinguished from the sterile soil below (29) only because of a minor chromatic change and the presence of a few sherds. These are of cord-or basket-impressed ware (like others found in Trench MMK, see fig. 18), one of them having been found at a height corresponding to the interface separating layer 28 from the sterile soil below, and being therefore referable to the very beginning of the Gotihawa deposit. This kind of ware is known from about the mid-2nd millennium B.C. from Neolithic sites of Northern India such as Kaldihawa in the hilly part of the Allahabad District (of. Allchin and Allchin 1989, pp. 117-18), where it is associated with stone blades, ground stone axes and the like. At Gotihawa we deal, rather, with a pottery of Neolithic tradition belonging to a more mature context. It has been noticed that in the Lower Ganges Plain elements of the Chalcolithic culture "continue to exist even in the succeeding phase of Early Iron Age" (Roy 1983, p. 17). As an example of this a few sherds from Kausambi, found in a context presumably similar to ours, are noticeable. Erroneously called "incised ware", they are associated to the *PGW* and are dated to the 7th century B.C. (Sharma 1960, p. 61; pl. 53, 5; cf. pl. 4). More evidence (though one which needs a careful examination) has recently come from Narhan, a site south of Gorakhpur on the Ghaghar river taken to represent a "Narhan culture" which flourished between the 11th and the 10th-9th century B.C. (Singh 1994, pp. 29-30, 43-44, 75 fig. 25). However, whereas in the reopened Waddell's trench (i.e. below the stupa) these sherds in the reopened Waddell's trench (i.e. below the stupa) these sherds (very few, actually) have been found the *NBPW* layers, in Trench MMK they are associated with the *NBPW*, so that nothing can be said at present on the existence of pre-*NBPW* strata in the deposit.

In layer 86, again in Trench MMK (cf. fig. 5) also fragments of red ware have been found which belong to a well-known class of prehistoric pottery (figs. 19-20). They are associated as well with the *NBPW*, so that we can only say that at Gotihawa there is a continuity of prehistoric artifacts through time. The red pottery fragments find comparison in other sites of the Ganges plain, as for instance Atranjikhera, Period III (where they are associated to the Grey Ware), as can be seen from several examples in Gaur (1983). Fragment no. GTH-p 191 (fig. 20) finds very close comparison at Narhan Period I (cf. Singh 1994, fig. 34 on p. 92, 20-27; here fig. 21), at Sravasti (Sinha 1967, fig. 11, XVVIX; here fig. 22) and at other sites as well.

The lower part of layer 86, which is one characterized by a very slow growth (see again the Matrix, fig. 5) is approximately contemporary with layer 28. It yielded a few charcoal samples, one of which underwent C14 examination by the Beta Analytic Radiocarbon Dating Laboratory, Miami. As can be seen in fig. 4, the sample goes back to about 800 B.C., which gives us a *post quem* for layers 86 and 28. We hope that a careful scrutiny of the lowermost layers will clarify the nature of the Gotihawa deposit, allowing us to understand why so distinctly different pottery classes are found together.

Also at Tilaurakot, sherds of impressed ware, all "invariably executed either on or immediately below the shoulder" were found by Debala Mitra in the early layers of Period 1 in association with the *NBPW* (Mitra 1972, p. 22). Thanks to the presence of a dated charcoal in our site, we think, however, that the caution demonstrated by Herbert Haertel

(1991) in evaluating the chronology of the archaeological sites in the District of Lumbini and Kapilavastu and in the adjacent Indian ones is too great, and that the archaeological sequence in this part of the Terai goes certainly back to a period preceding the earlier possible date to which the life of the Buddha can be attributed.

List of the Units of Stratigraphy Reported in the Matrix (Fig. 5) and in Section 2 (Fig. 3)

1. Humus
3. Sandy silt with brickbats. Disturbed.
16. Collapse of structure
20. Sandy silt
21. Sandy silt deposited by hydric-gravitational erosion. Rare potsherds
22. Sandy silt due to erosion, very homogeneous. Very rare, minute potsherds and brickbats
25. Pavement
26. Sandy silt
27. Sandy silt with charcoal
28. Sandy silt which rare potsherds
29. natural soil
31. Sandy silt with minute brickbats.
33. Sandy silt with *NBPW* fragments and animal bones
34. Sandy silt with animal bones
35. Pavement
37. Ring of bricks (stupa)
38. Ring of bricks (stupa)
40. Ring of bricks (stupa)
41. Ring of bricks (stupa)
42. Ring of bricks (stupa)
48. Collapse of bricks
75. Sandy silt with few brickbats
81. Pavement
83. Sandy silt
84. Pavement
86. Clayey layer with charcoal and potsherds
100. Core part of stupa
101. Negative interface.

References

Allchin, B and Allchin, R. (1982) *The Rise of Civilization in India and Pakistan.* Cambridge.

Deo, S.B. (1968) *Archaeological Investigations in the Nepal Terai: 1964.* Department of Archaeology of HMG. Kathmandu

Gaur, R.C. (1983) *Excavations at Atranjīkherā. Early Civilization of the Upper Gaṅgā Basin.* Delhi.

Härtel, H. (1991) Archaeological Research on Ancient Buddhist Sites, in H. Bechert ed., *The Dating of the Historical Buddha. Die Datierung des historischen Buddha*, Part 1, pp. 61-89. Göttingen.

Irwin, J. (1977) The Stūpa and the Cosmic Axis: The Archaeological Evidence, in M. Taddei ed., *South Asian Archaeology 1977*, 2 vols., pp. 799-845. Naples.

Mishra, T.N. (1977) Tilaurakot Excavations (2023-2029 V.S.), in *Ancient Nepal*, 41-42, pp. 11-31. Kathmandu.

Mitra, D. (1972) *Excavations at Tilaura-Kot and Kodan and Explorations in the Nepalese Terai.* Kathmandu.

Mukherji, P. Ch. (1901) *A Report on a Tour of Exploration of the Antiquities in the Terai, Nepal, the Region of Kapilavastu, during February and March, 1989.* Archaeological Survey of India, New Imperial Series, Part I. Calcutta.

Nakamura, Z. ed. (1978) *Tilaura Kot. Fortified*

Village in Terai Excavated in 1967-1977, vol. 2 (Plates). Tokyo.

Rijal, B.K. (1973) Excavation, Exploration and Other Archaeological Activities in Tilaurakot: 1972-73, in *Ancient Nepal*, 22, pp. 60-69. Kathmandu

Rijal, B.K. (1974) Excavation and Other Archaeological Activities in Tilaurakot (Ancient Kapilavastu): 1973-1974, in *Ancient Nepal*, 26, pp. 41-45. Kathmandu.

Rijal, B.K. (1975-77) Archaeological Activities in Lumbini, 1976-77, in *Ancient Nepal*, 30-39, pp. 28-33. Kathmandu.

Rijal, B.K. (1979) *Archaeological Remains of Kapilavastu, Lumbini and Devadaha*. Kathmandu.

Rijal, B.K. (1996) *100 Years of Archaeological Research in Lumbini Kapilavastu and Devadaha. With the Reprint of A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal (1901) by P.C. Mukherji*. Kathmandu.

Roy, T.N. (1983) *The Ganges Civilization. A Critical Archaeological Study of the Painted Grey Ware and Northern Black Polished Ware Periods of the Ganga Plains of India*. New Delhi.

Sharma, G.R. (1960) *The Excavations at Kauśāmbī (1957-59). The Defences and the Śyenaciti of the Puruṣamedha*. Allahabad.

Singh, P. (1994) *Excavations at Narhan (1984-89)*. Varanasi.

Sinha, K.K. (1967) *Excavations at Sravasti - 1959*. Varanasi.

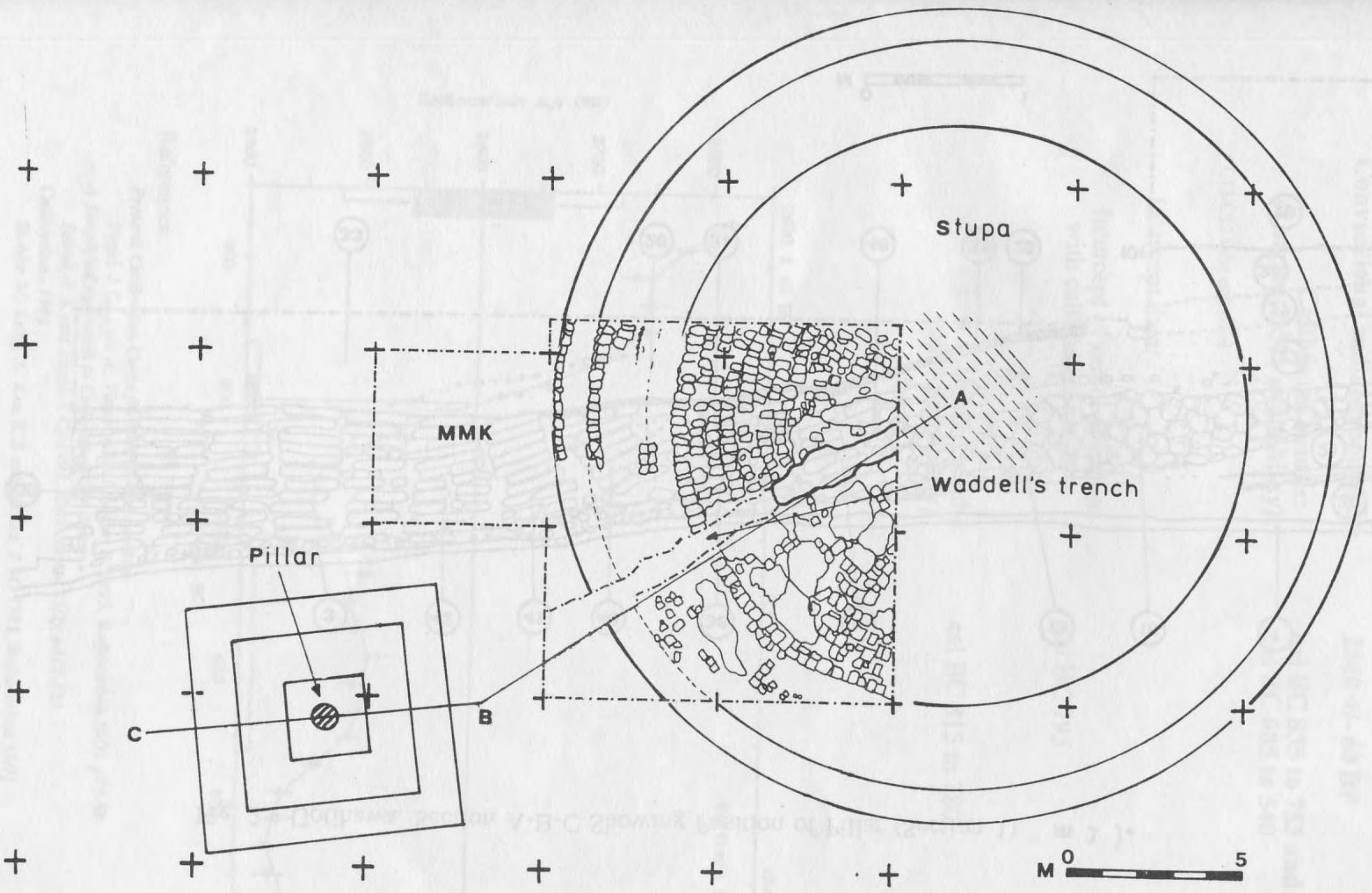


Fig. 1 - Gotihawa. Excavated Area in January 1995.

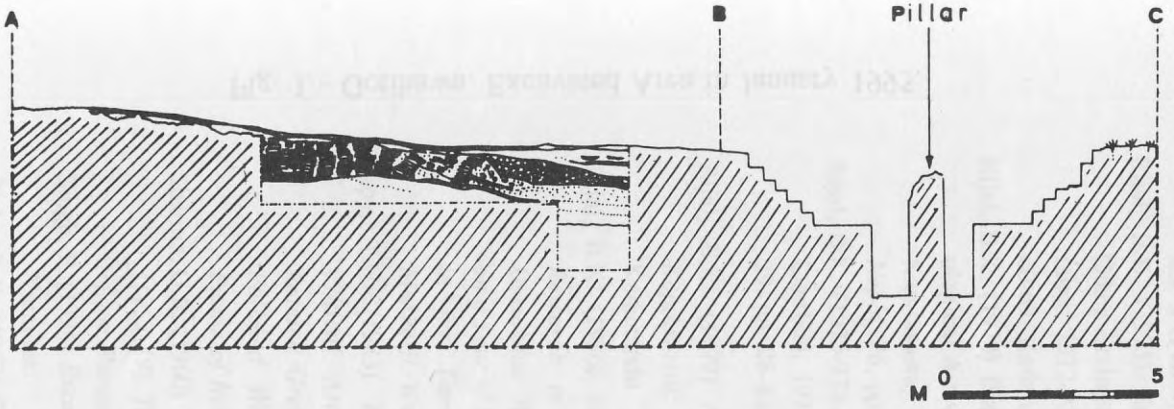


Fig. 2 - Gotihawa. Section A-B-C Showing Position of Pillar (Section 1).

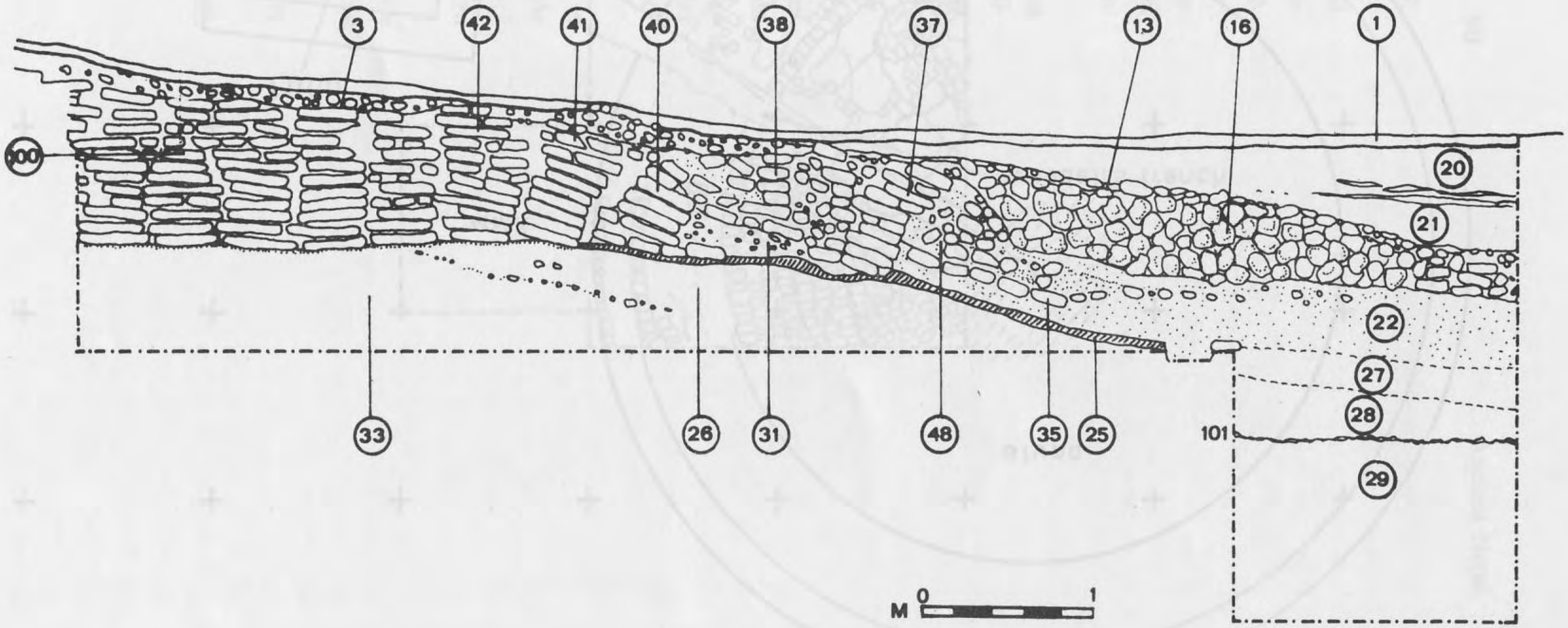


Fig. 3 - Gotihawa. Section Exposed Along Waddell's Trench (Section 2).

Conventional radiocarbon age*: **2600 +/- 60 BP**

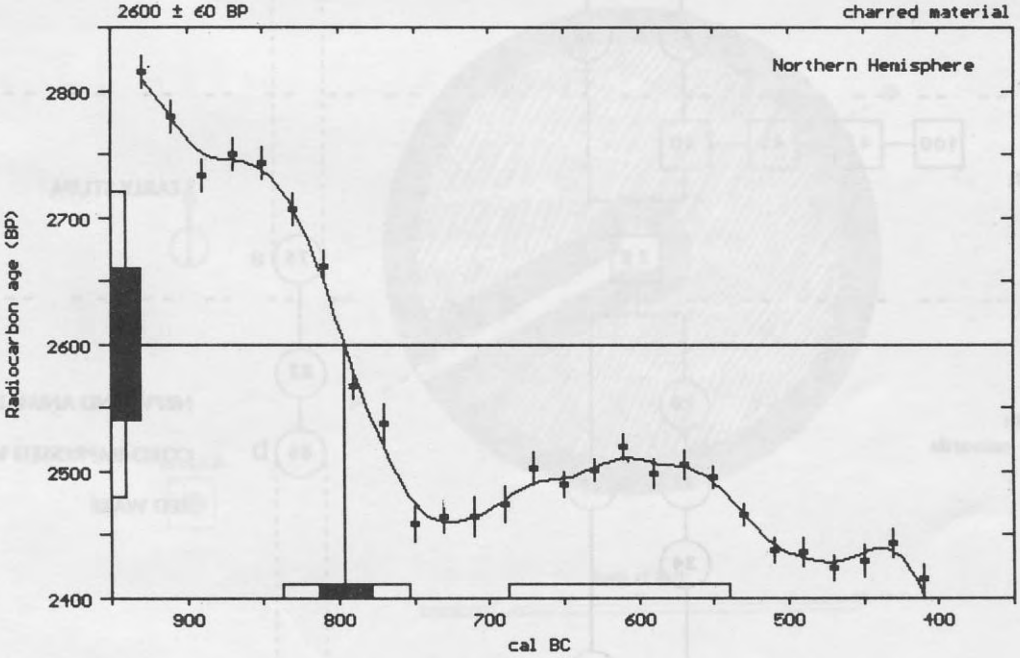
Calibrated results: **cal BC 835 to 755 and**
(2 sigma, 95% probability) **cal BC 685 to 540**

* C13/C12 ratio estimated

Intercept data:

Intercept of radiocarbon age with calibration curve: cal BC 795

1 sigma calibrated results: (68% probability) cal BC 815 to 780



References:

Pretoria Calibration Curve for Short Lived Samples
Vogel, J. C., Fuls, A., Visser, E. and Becker, B., 1993, Radiocarbon 35(1), p73-86
A Simplified Approach to Calibrating C14 Dates
Talma, A. S. and Vogel, J. C., 1993, Radiocarbon 35(2), p317-322
Calibration - 1993
Stuiver, M., Long, A., Kra, R. S. and Devine, J. M., 1993, Radiocarbon 35(1)

Fig. 4 - Dating of Charcoal Samples from Layer 86 (ca. 800 B.C.). Beta Analytic Radiocarbon Dating Laboratory, Miami (USA).

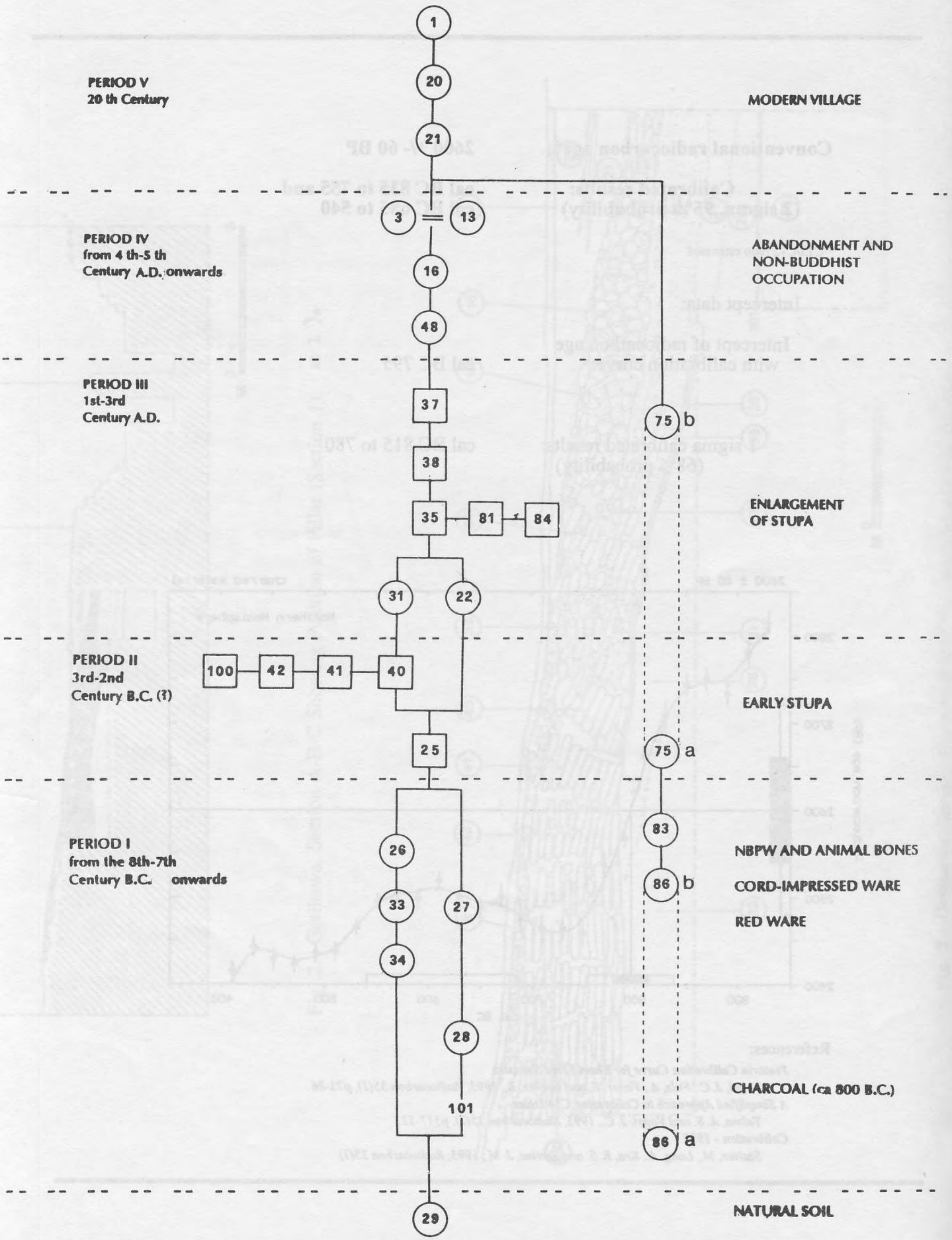


Fig. 5 - Gotihawa. Matrix of 1994-95 Excavation, with Tentative Chronology and Subdivision into Periods.

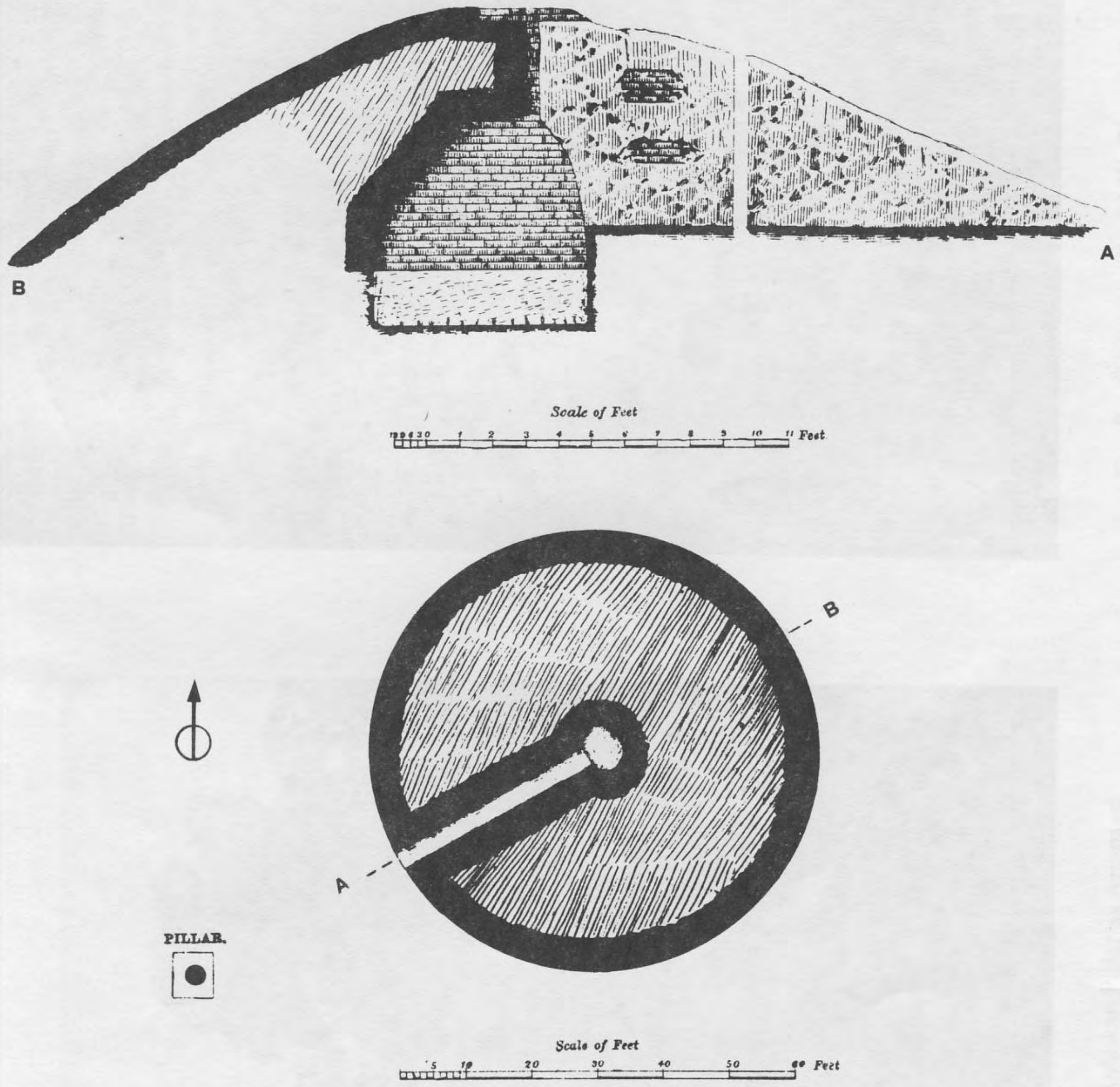


Fig. 6 - The Stupa at Gotihawa According to P.C. Mukherji (1901, pl. XVII).

Fig. 7 - Gotihawa. Ashokan Pillar as Arranged
in 1959 and Excavated Area (Winter 1994-95).

Fig. 8 - Gotihawa. Waddell's Trench Partly Re-opened.

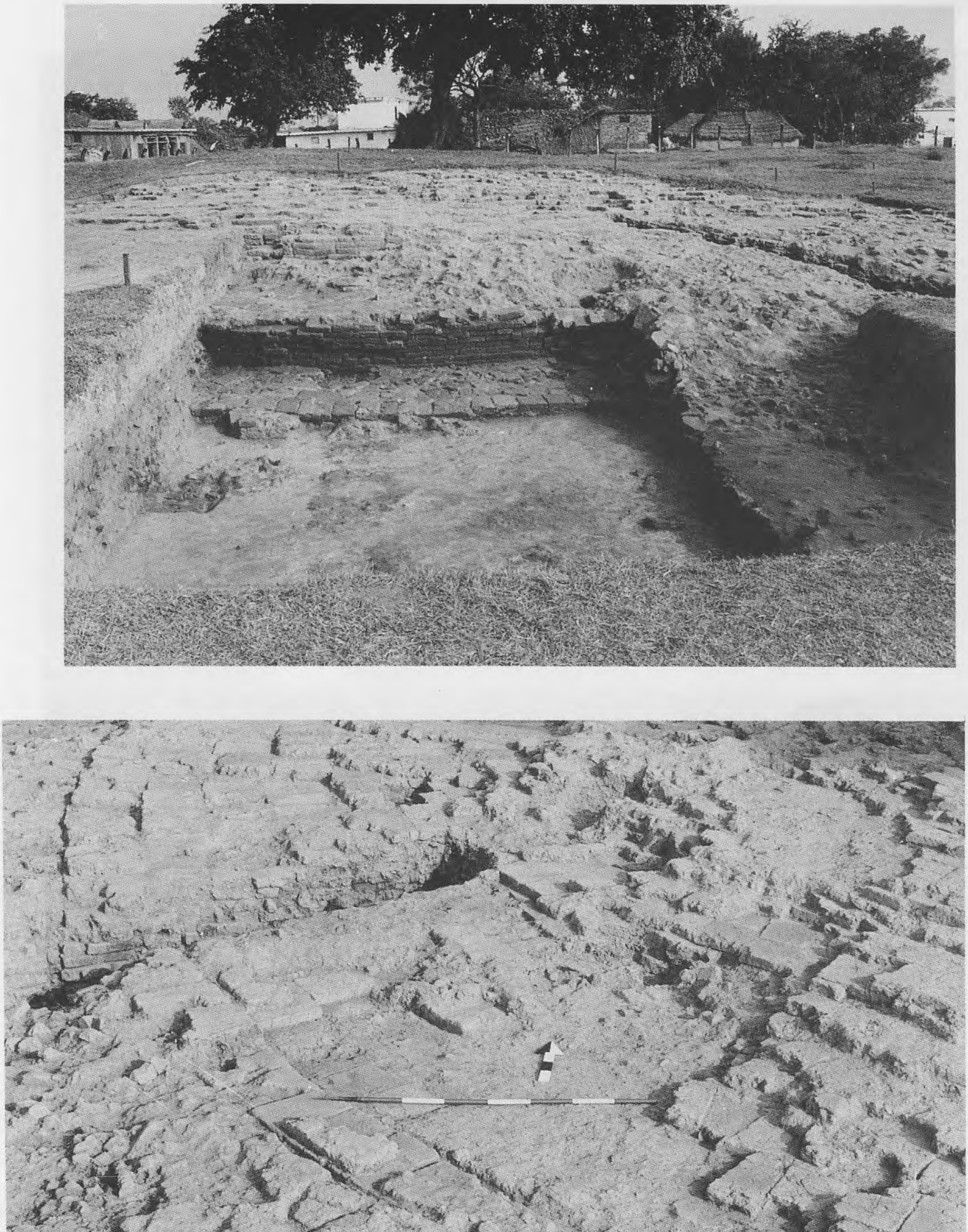


Fig. 9-10 - Gotihawa. Excavated Part of Stupa.

Fig. 11 - Gotihawa. Detail of Stupa.

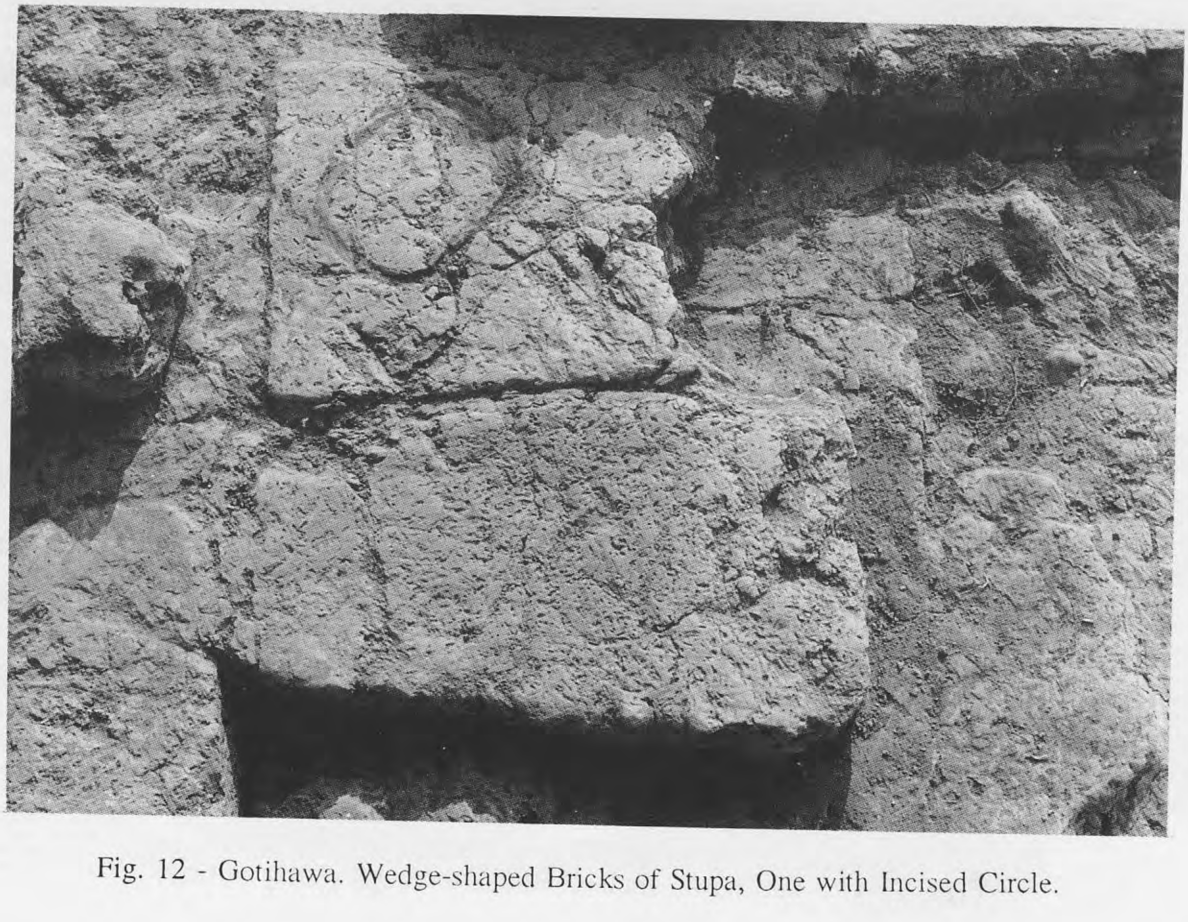
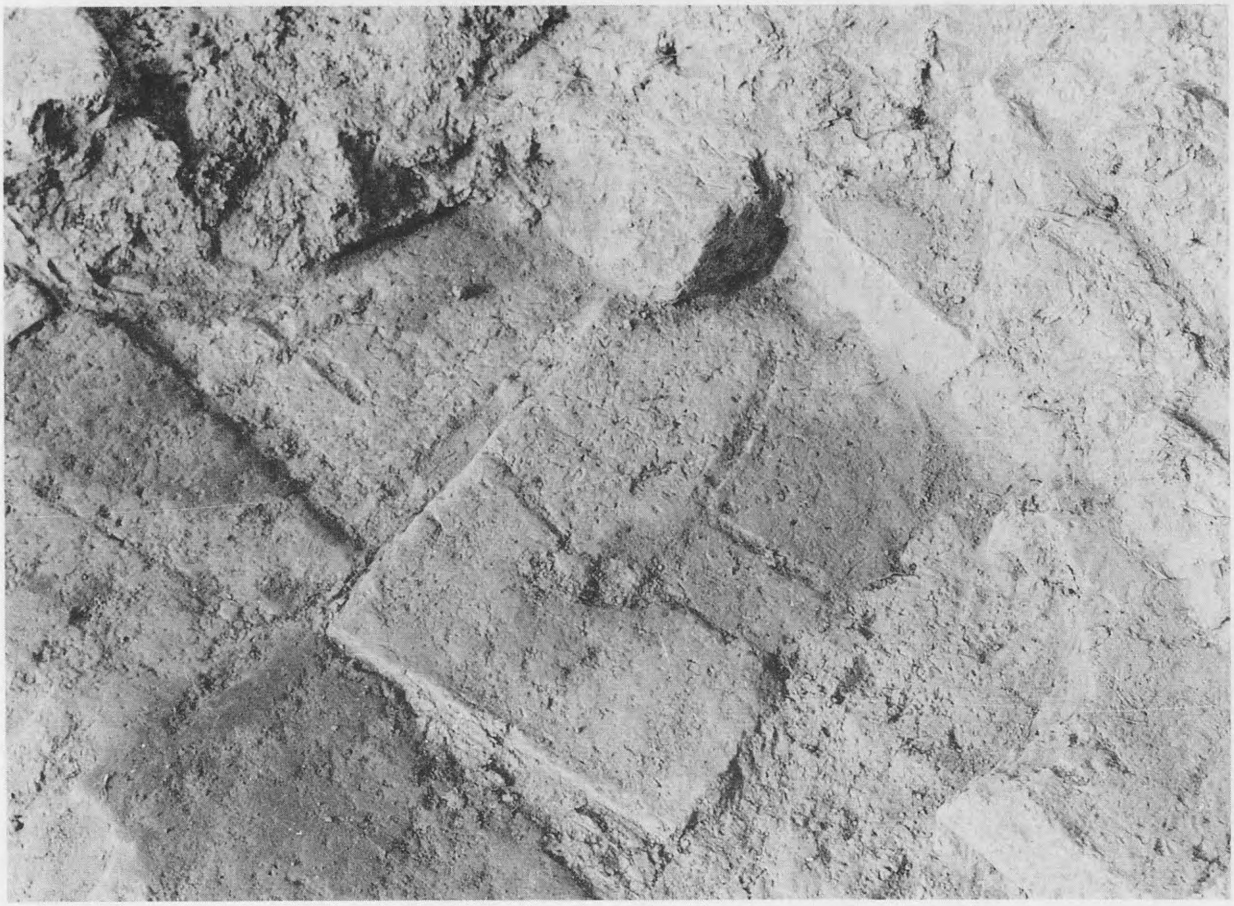
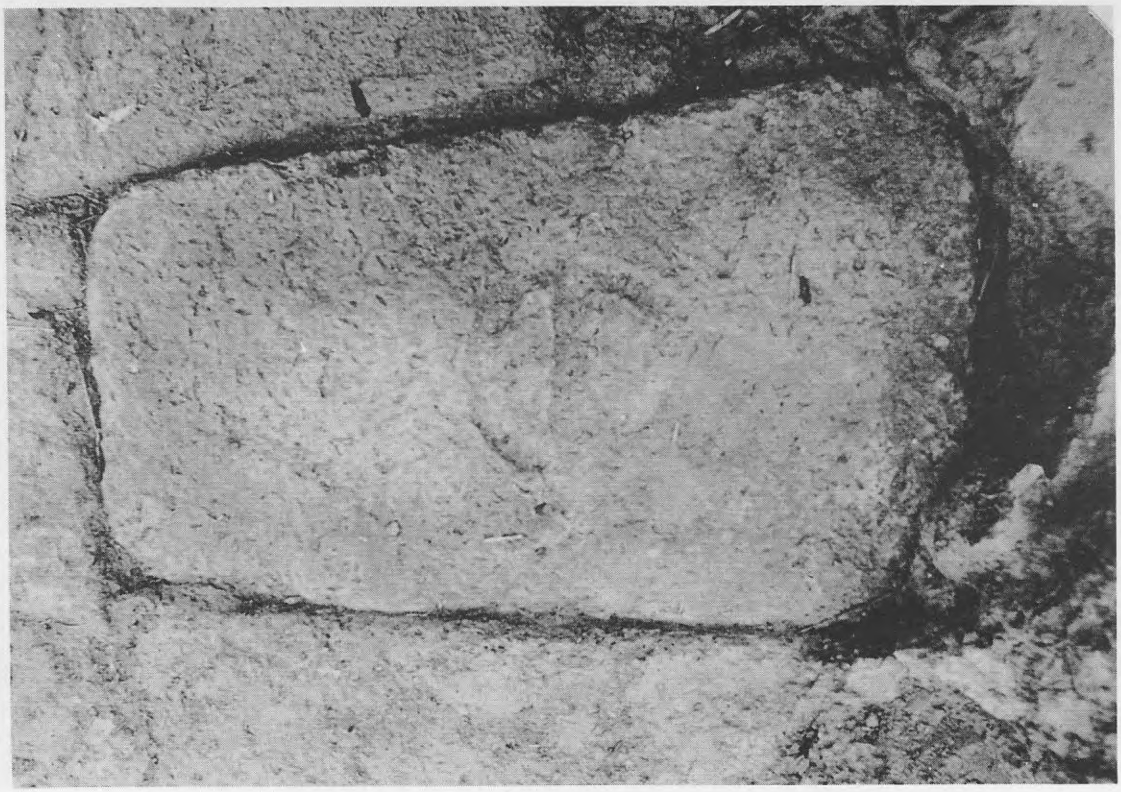
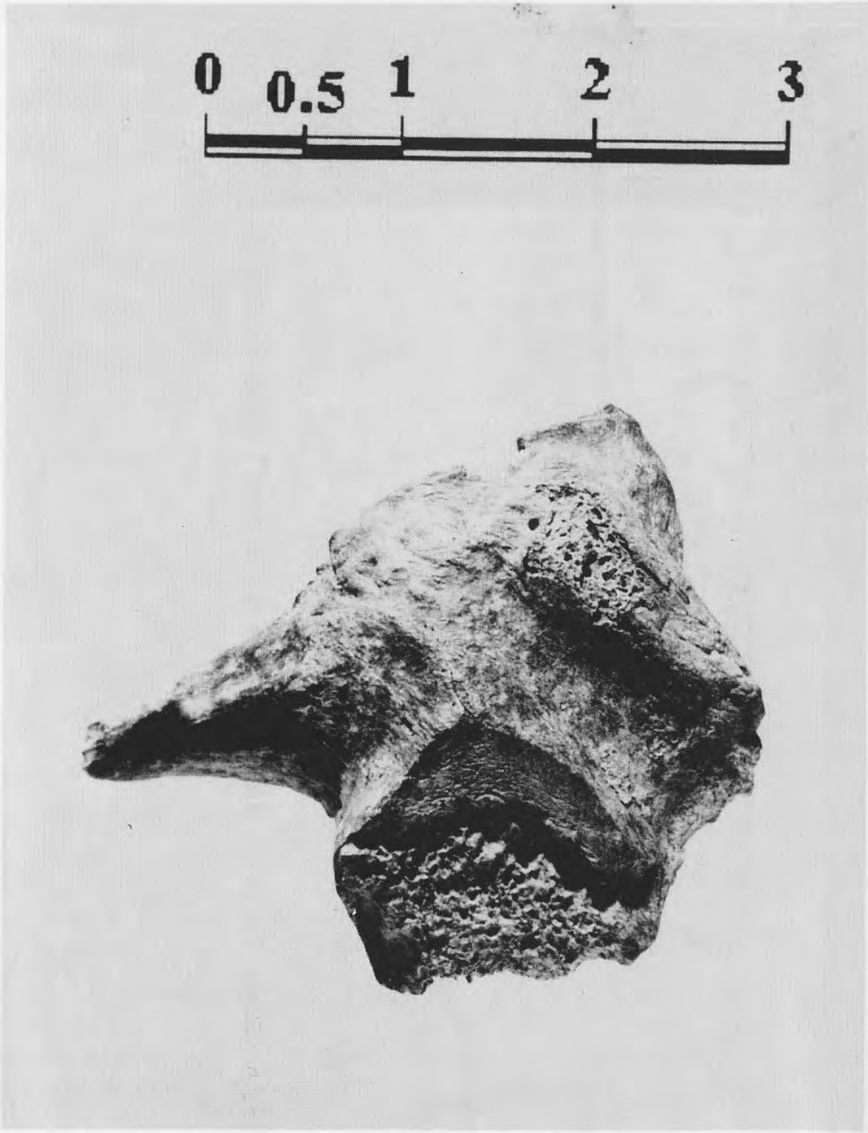


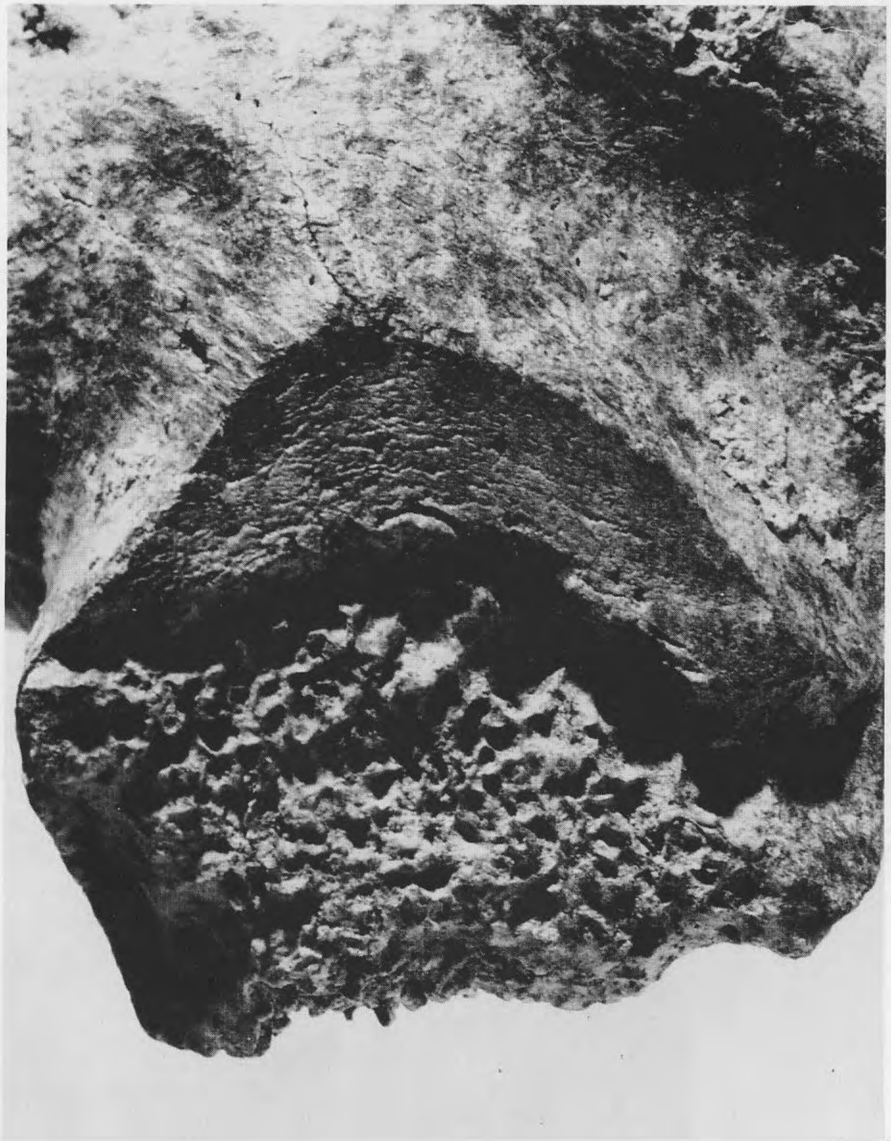
Fig. 12 - Gotihawa. Wedge-shaped Bricks of Stupa, One with Incised Circle.





Figs. 13-14 - Gotihawa. Incised Bricks of Stupa (Early Period).





Figs. 15-16 - Gotihawa. Fragment of Pelvis of *Bos Indicus* Struck by Violent Blow. From Layer 34.

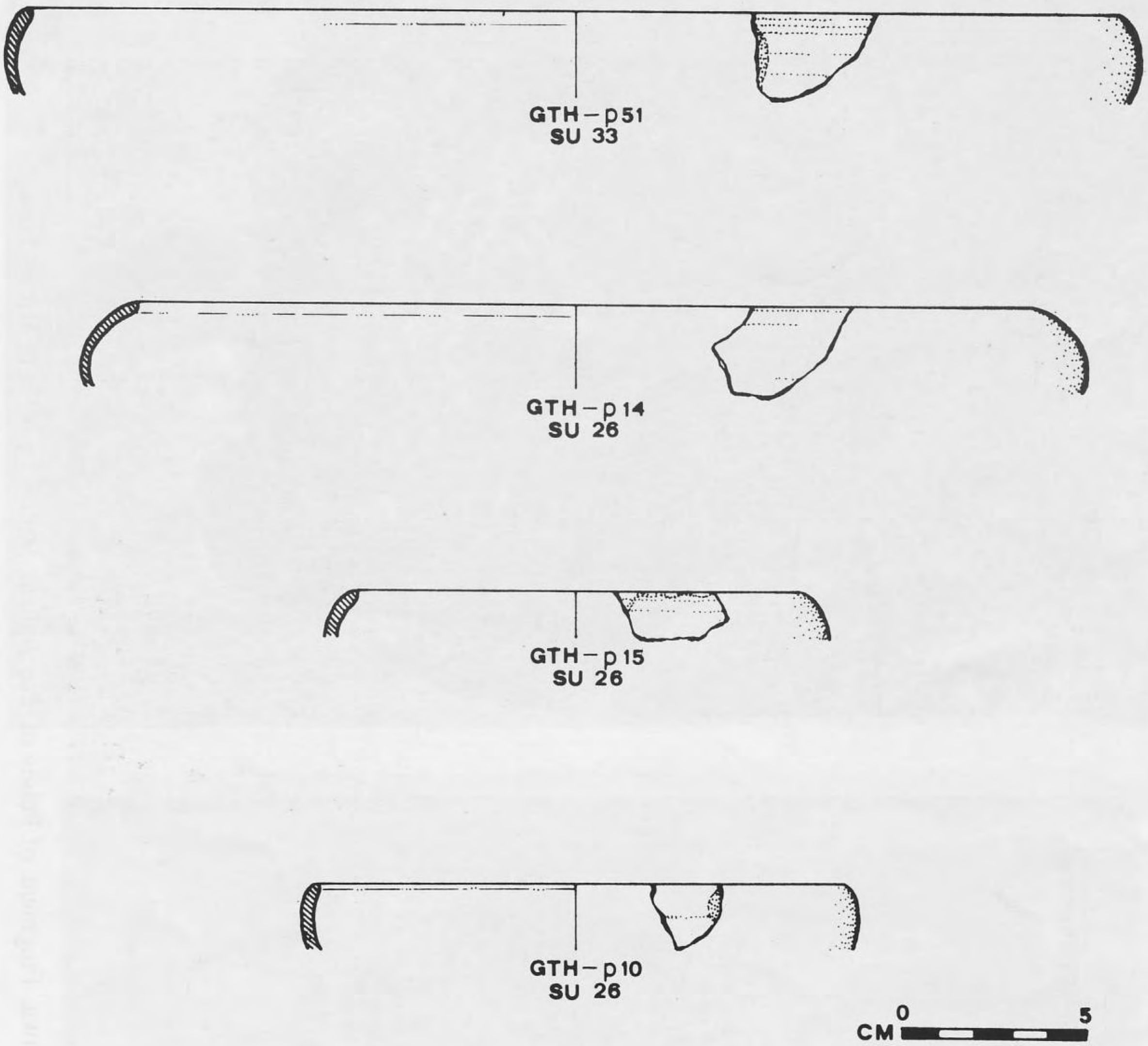


Fig. 17 - Gotihawa. *Northern Black Polished Ware* from Layers 26 and 33.

Fig. 18 - Gotihawa. Cord-impressed Ware. Bottom Right Fragment from Lower Part of Layer 28.

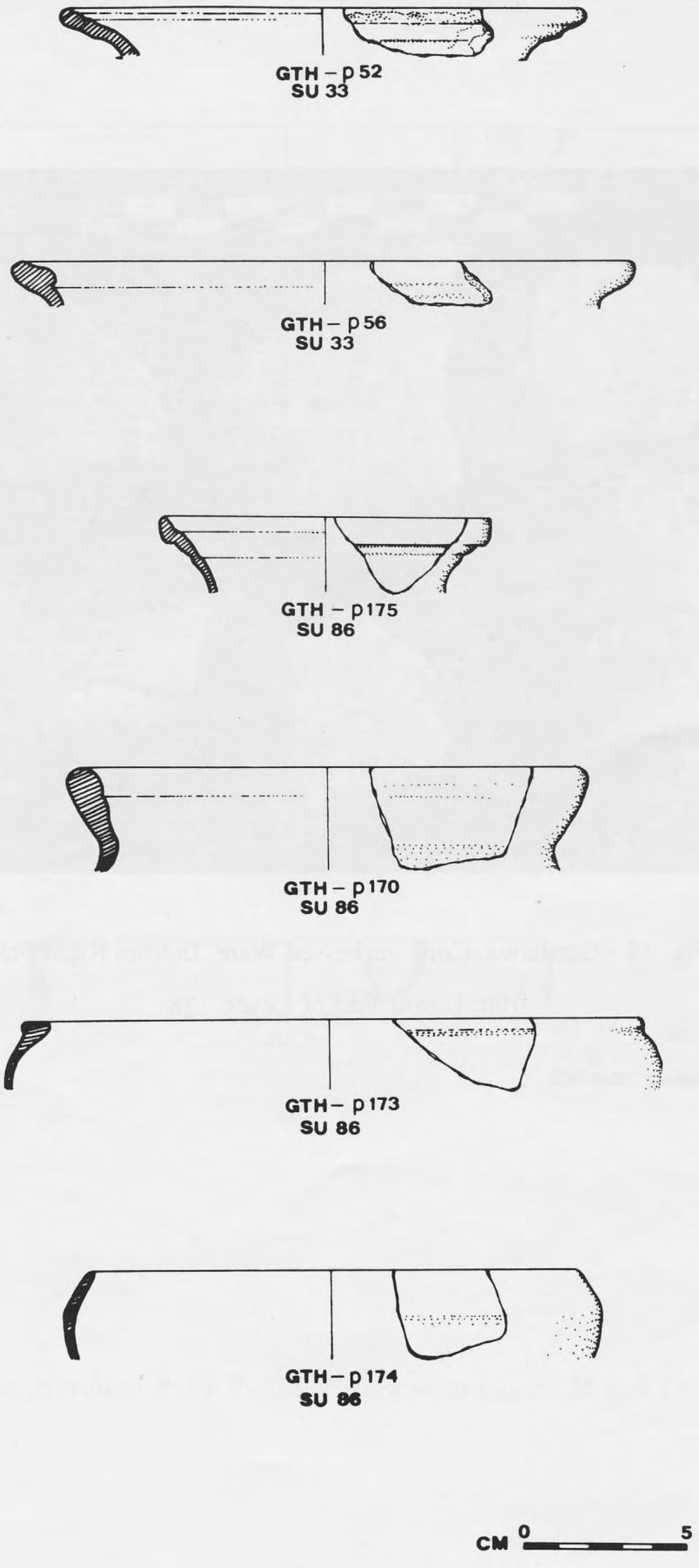


Fig. 19 - Gotihawa. Red Ware of Period I from Layer 86.

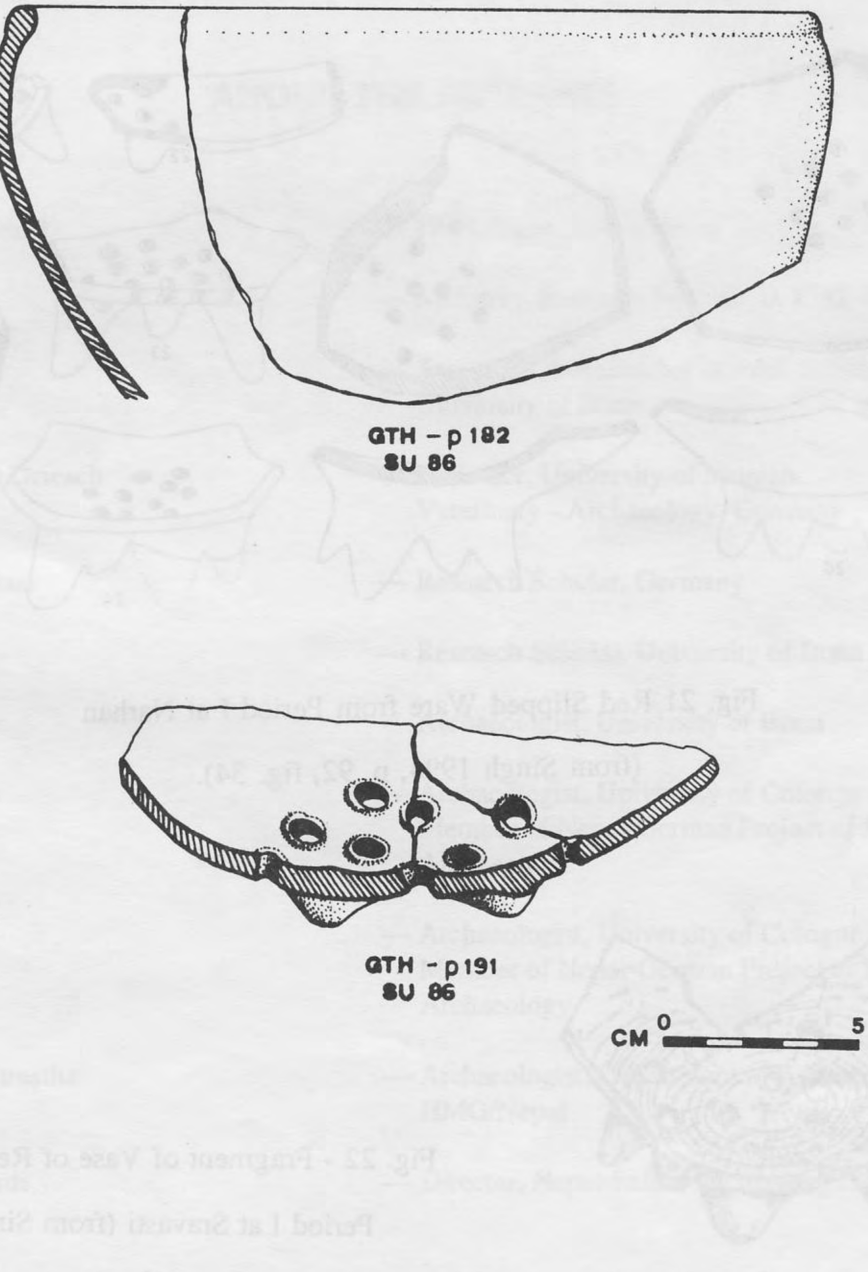


Fig. 20 - Gotihawa. Red Ware from Layer 86.

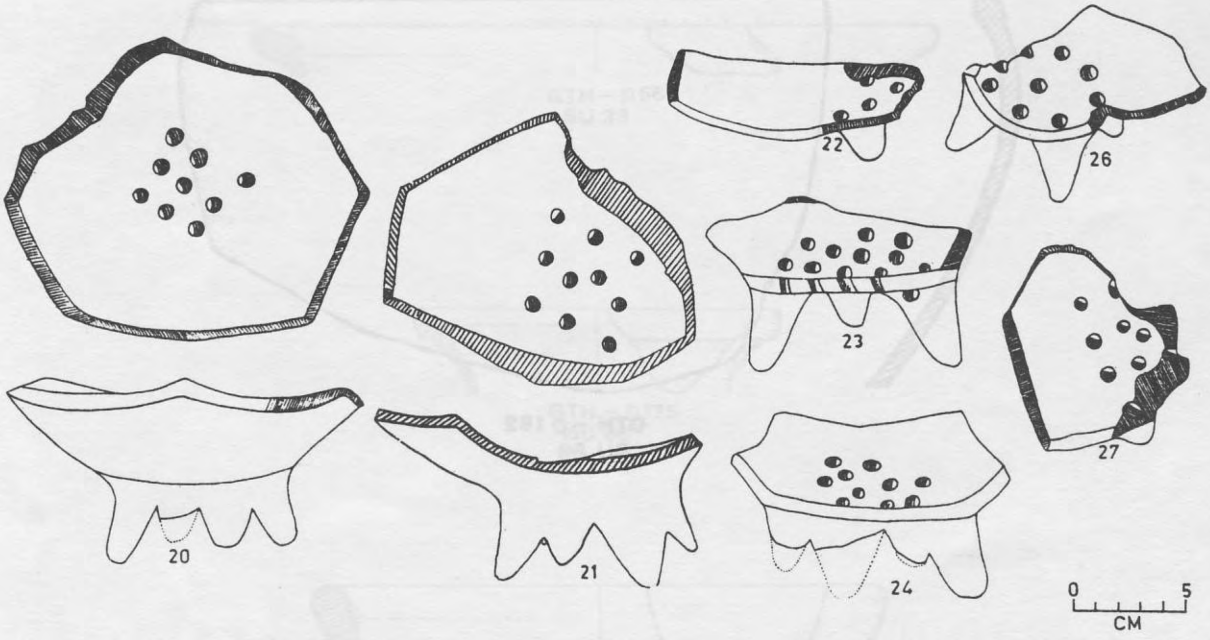


Fig. 21 Red Slipped Ware from Period I at Narhan

(from Singh 1994, p. 92, fig. 34).

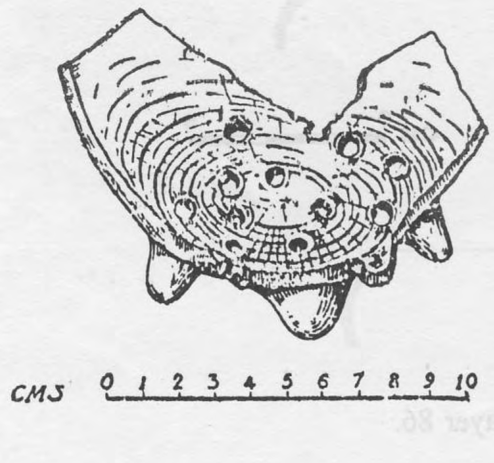


Fig. 22 - Fragment of Vase of Red Ware from

Period I at Sravasti (from Sinha 1967

fig. 11, XLIX).

ABOUT THE AUTHORS

Dr. Franz-Karl Ehrhard	— Tibetologist, University of Münster, Bonn
Dr. John Harrison	— Architect, Research Scholar, D. F. G. Bonn
Dr. Charles Ramble	— Assistant Co-researcher of Prof. Schuh University of Bonn
Dr. Angela von den Driesch	— Professor, University of Munich Veterinary - Archaeology, Germany
Dr. Henriette Manhart	— Research Scholar, Germany
Ms. Petra Maurer	— Research Scholar, University of Bonn
Dr. Ernst Pohl	— Archaeologist, University of Bonn
Dr. Angela Simons	— Archaeologist, University of Colonge Member of Nepal-German Project of High Mountain Archaeology
Dr. Werner Schön	— Archaeologist, University of Cologne Member of Nepal-German Project of High Mountain Archaeology
Mr. Sukra Sagar Shrestha	— Archaeologist, Department of Archaeology HMG/Nepal
Dr. Giovanni Verardi	— Director, Nepal-Italian Archaeological Mission

का. मे. अ. द. नं. ८/६८,   हु. द. स. बा. अ. नं. २/०२३

"**प्राचीन नेपाल**" का निमित्त प्राग्-इतिहास तथा पुरातत्त्व, लिपिविज्ञान, हस्तलिखित ग्रन्थ, मुद्राशास्त्र, अभिलेख, संग्रहालय तथा ललितकलासंग सम्बन्धित मौलिक रचनाको माग गरिन्छ ।

रचना संक्षिप्त तर प्रामाणिक हुनुका साथै अद्यापि अप्रकाशित हुनुपर्दछ । तर कुनै प्रकाशित विषयको सम्बन्धमा नयाँ सिद्धान्त र प्रमाण प्रस्तुत गरिएको भए तिनको स्वागत गरिनेछ ।

रचनासंग सम्बन्धित चित्रहरू पठाउन सकिनेछ । रचना पृष्ठको अग्रभागमा मात्र लेखिएको हुनुपर्नेछ । प्रकाशित लेखहरूमा व्यक्त गरिएको भावना वा मत सम्बन्धित लेखकको हुनेछ ।

महानिर्देशक
पुरातत्त्व विभाग
रामशाहपथ
काठमाडौं, नेपाल

Contribution of original nature dealing with pre-historic and field-archaeology, epigraphy, manuscripts, numismatics, archives, art, anthropology and architecture of Nepal and museum and other techniques connected with various aspects of art work are invited to "**Ancient Nepal**".

The contribution should be concise and well-documented and based on hitherto unpublished data, if not new interpretation of already known evidence.

The opinions expressed are those of the authors and do not necessarily reflect the views of the Editor or The Department of Archaeology.

Photographs and illustrations (line drawing) may be sent. The typescript should be in double space and one side of the paper only sent to:

The Director General
Department of Archaeology
Ramshahpath
Kathmandu, Nepal